

March/April 2019
Volume 44, Number 5



A Publication of
National
Stereoscopic
Association, Inc.

3-D Imaging Past, Present & Future

STEREO WORLD

**A Reely
Fuzzy
Future?**



Muybridge

Martian Stereographer

'50s Flavored Finds

A taste of the late '40s through the early '60s found in amateur stereo slides

by Mark Willke

View-Master Odds & Ends

The images reproduced in this column are often somehow related, by subject, photographer or some other common thread. But I'm starting to run low on material to share here, so I'm struggling to put together a linked set of views for this issue. The only thing these share is that they are all taken from View-Master Personal reels. Actually, the first two may feature the same girl a few years apart, but the reels are unlabeled, so nothing is certain.

A snowball coming toward the camera makes for some great 3-D, but I hope the photographer didn't end up with a camera full of snow! A cute baby elephant and a cozy cabin interior finish things up this time.

If you have some fun images you'd like to share in this column, please let us know. We can use scans, or we can scan your slides or reels. 📷

This column combines a love of stereo photography with a fondness for 1950s-era styling, design and decor by sharing amateur stereo slides shot in the "golden age" of the Stereo Realist—the late 1940s through the early 1960s. From clothing and hairstyles to home decor to modes of transportation, these frozen moments of time show what things were really like in the middle of the twentieth century.

If you've found a classic '50s-era image that you would like to share through this column, please send the actual slide or a high-resolution side-by-side scan as a jpeg, tiff or photoshop file to: Fifties Flavored Finds, 5610 SE 71st, Portland, OR 97206. You can also email the digital file to strwld@teleport.com. If the subject, date, location, photographer or other details about your image are known, please include that information as well.

As space allows, we will select a couple of images to reproduce in each issue. This is not a contest—just a place to share and enjoy. Slides will be returned within 6 to 14 weeks, and while we'll treat your slide as carefully as our own, Stereo World and the NSA assume no responsibility for its safety.



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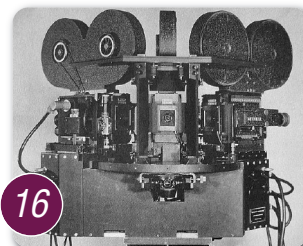
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by Russell Norton



Front Cover:

The new "View Magic" design
View-Master knock-off from the
toy company Warm Fuzzy, found
at the 2019 New York Toy Fair.
See Editor's View and
"View-Master at 80"
by Sheldon Aronowitz.

Back Cover:

Our remembrance of the
now deceased Mars rover
Opportunity and its many
amazing stereos includes this
dramatic shot of the Duck Bay
area of Victoria Crater from
September, 2007. Thanks to
Ron Kriesel for selecting
and pairing the image
(cover color added).

(Courtesy NASA/JPL-Caltech)



The National Stereoscopic Association

is a non-profit organization whose goals are to promote research, collection and use of vintage and contemporary stereoviews, stereo cameras and equipment, and related materials; to promote the practice of stereo photography; to encourage the use of stereoscopy in the fields of visual arts and technology; to foster the appreciation of the stereograph as a visual historical record.

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Fuzzy 3-D

Ever since the late 1940s, companies around the world have tried cashing in on the View-Master concept by marketing knock-offs of varying styles and quality. One noticed by *Stereo World* contributor



Three Obits

This issue contains three obituaries, two for human women and one for a robot, but all three strongly associated with stereoscopic imagery.

While both extremely deserving people were left out of the

"In Memoriam" segment at the 91st Academy Awards show February 24th, we've remembered in this issue IMAX filmmaker Toni Myers and

actor Julie Adams. The snubbing of Adams by the Academy is uniquely galling, since it was her character's interaction with the Creature in *Creature From the Black Lagoon* that

helped inspire the making of the previous year's BEST PICTURE winning

Editor's View

Comments and Observations

by John Dennis

film—*The Shape of Water*.

Far more widely covered was the death of robotic Mars rover Opportunity, officially announced by NASA on February 13th, but likely occurring around June of last year when its solar panels were covered by a dust storm, making it impossible to charge batteries and keep vital systems warm. We've remembered Opportunity in this issue not so much for its astounding mechanical and electronic longevity, but for the thousands of stereos its cameras shot in a hostile environment far from home. Human stereographers have certainly faced the above challenges,

(Continued on page 32)



Image3D's RetroViewer.



Sheldon Aronowitz at this year's New York Toy Fair bears the unfortunate company name (for a 3-D viewer) "Warm Fuzzy." We're not sure just how sharp the product's lenses or images actually are, but the bold design of their clear face plate "View Magic" model (interesting initials, there) made it an irresistible shiny object for the cover. Even if the lenses and images are sharp, there appears to be very little light diffusion provided in front of the images—the one place where maximum "fuzzy" is needed to avoid hot spots! See "View-Master At 80" in this issue.

But among the descendants of View-Master, one stands out for both innovation and quality. The Image3D reels and "RetroViewer" have preserved custom 3-D imaging in the reel format, making it more accessible and affordable after View-Master abandoned the business. NSA member and former View-Master stereographer Rich Dubnow has fine-tuned both the reels and viewer, with the viewer design licensed from Mattel. See image3d.com for details on seeing your own stereos on reels.

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Opportunity 2004-2018

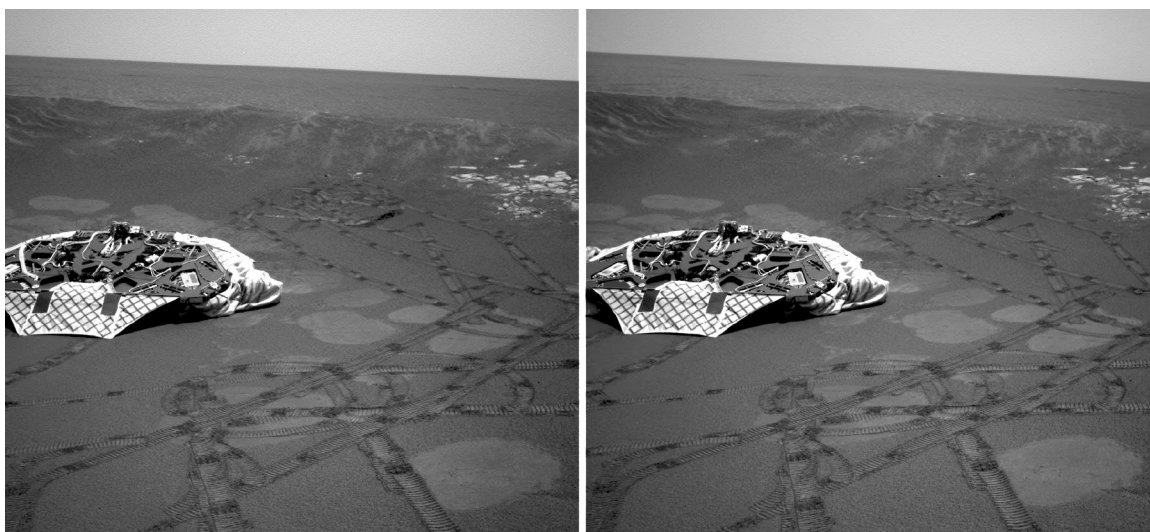
by John Dennis

Few robots have received as much media attention as the Mars rover Opportunity did when NASA announced its demise (due to a 2018 planet wide dust storm and the Martian winter) on February 13, 2019. Obituaries ranged from appreciative to wistful, sentimental, and even poetic in describing the rover's nearly 15 years of exploration beyond its original 90 day mission. Deservedly, much was made of Opportunity's 28 plus miles of travel across Mars, performing multiple sci-

images to reward days of browsing through the files of thumbnail pairs and viewing or saving the best as higher resolution stereos. Beyond providing some sense of *being* on Mars with the chance to study interesting features from multiple distances and angles, many of these stereos could rival the best work of human stereographers in terms of subject choice, composition, lighting etc. Especially with the best black and white stereos from the navigation cameras, it's tempting to imag-

ine similar views being produced by the likes of G.W. Wilson, William Rau, W.H. Jackson, or C.E. Watkins, had they been transported to Mars in some H.G. Wells contraption, given steampunk inspired space suits, and supplied with unlimited glass plates to document the planet for a vast, waiting market back on Earth. (And the journey would certainly have tested Eadweard Muybridge's boast that he took "considerable risk to his personal safety" to produce "the best pictures.")

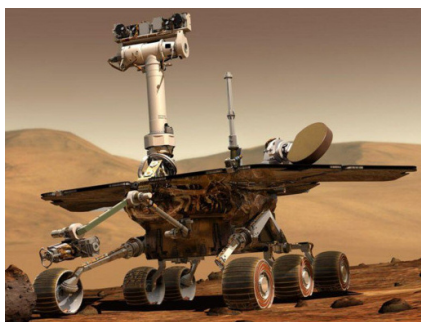
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Opportunity's tracks in Eagle Crater, Meridiani Planum starting where it first rolled off the lander on January 24, 2004. Taken by the navigation cameras 33 days after arrival (Sol 33).
 (Courtesy NASA/JPL-Caltech)



ence experiments, finding evidence of ancient water and sending back over 210,000 photos.

But aside from perhaps seeing the occasional anaglyph, few people are aware of the vast trove of amazing stereographs produced by the navigation and panorama cameras over those years. While of course not all are gems, there are enough amazing

.....
An artist's ground-level view of Opportunity on Mars. (Courtesy NASA)



GONE MADD

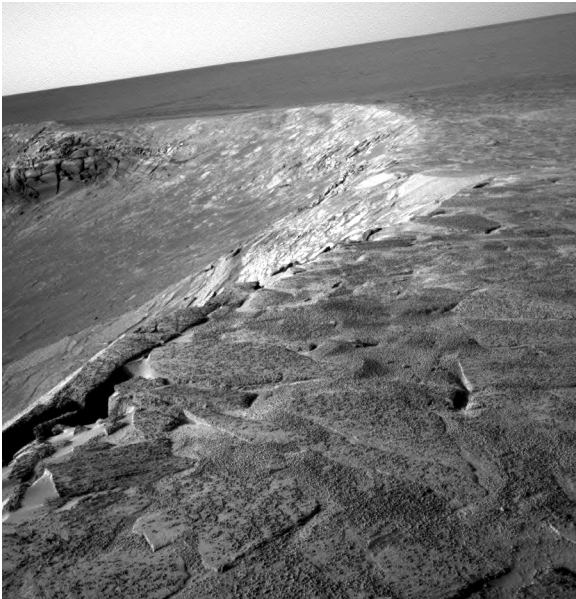
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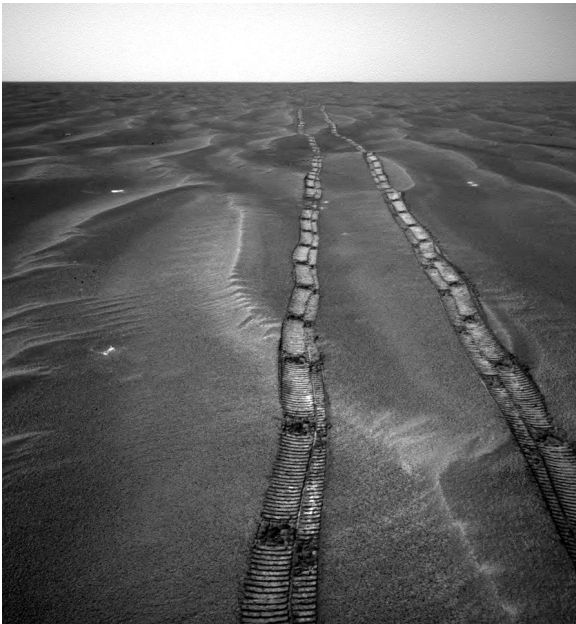
"DON'T WORRY, I'M A 3-D ENTHUSIAST AND ALL THIS PLACE NEEDS IS A SLIGHT PARALLAX ADJUSTMENT AND IT WILL SEEM A LOT ROOMIER!"



"DON'T WORRY, I'M A 3-D ENTHUSIAST AND ALL THIS PLACE NEEDS IS A SLIGHT PARALLAX ADJUSTMENT AND IT WILL SEEM A LOT ROOMIER!"



.....
 At 116 Mars (Sol) days after its January 2004 landing in Eagle Crater, Opportunity explored nearby Endurance Crater, which at this edge in 3-D looks more intimidating than it proved to be.
 (Courtesy NASA/JPL-Caltech)



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 During the four mile drive from Endurance Crater to Victoria Crater, Opportunity shot this lonely view of its tracks through seemingly endless ripples of sand on Sol 411.
 (Courtesy NASA/JPL-Caltech)



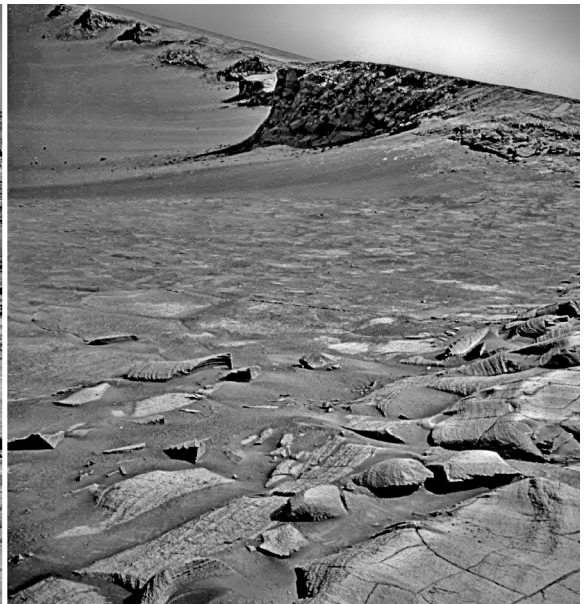
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 The panorama cameras shot this rather scary view, looking over the edge into Victoria Crater on Sol 972 a few days after arriving there and looking for a safe way in.
 (Courtesy NASA/JPL-Caltech)

Space allows us to remember Opportunity with only a few images here, but at tinyurl.com/y4p34yj9 you can sample pairs from various cam-

eras by clicking on a Sol (Martian day) and quickly freeviewing whatever comes up. It can be both frustrating and addictive, but there are

amazing stereos hidden in those files. Thanks to NSA member Ron Kriesel for helping select and pair several images. 📷📷

.....
In September, 2007 on Sol 1329, the Navigation cameras captured this dramatic view in the Duck Bay area of Victoria Crater where Opportunity was able to enter and roam, taking pictures until August, 2008. (Pairing and alignment by Ron Kriesel.) (Courtesy NASA/JPL-Caltech)



.....
By late March of 2016, Opportunity had reached the western rim of Endeavour Crater, where the navigation cameras shot this dust devil at upper right. (Sol 4332). The tracks up Knudsen Ridge follow the steepest slope climbed by any Mars rover. (Pairing and alignment by Ron Kriesel.) (Courtesy NASA/JPL-Caltech)



.....
Exposed rocks form a Z pattern in front of dramatic slopes near the western rim of Endeavour Crater on Sol 4628 in early 2017. Just days before, Opportunity had reached its 13th year of exploration and stereography on Mars. (Courtesy NASA/JPL-Caltech)



2019 3D-Con Excursions

by Barb Gauche and John Bueche

Stan Hywet Hall and Gardens, Tuesday, July 30

Explore the beautiful flower gardens and reflecting pools at the majestic Stan Hywet Hall, a 65 room Tudor Revival Manor House built between 1912 and 1915 by Goodyear co-founder F. A. Seiberling for his family. The estate includes five historic buildings and ten historic gardens on 70 acres. The collections and furnishings in the manor house are original to the estate. For more about the Estate, visit stanhywet.org.

Suite Life at the Ballpark, Tuesday, July 30

Play Ball!! We have a suite reserved for the first 40 people who sign up for this exciting event. The evening includes a bus ride to Canal Park, home of the Akron RubberDucks Double-A baseball team, a tour of the stadium, photography on the field during batting practice (limited to first and third base lines), seats in the Owner's Suite (located directly behind home plate), buffet dinner consisting of typical baseball fare, and a ball game. That night the RubberDucks will be hosting the New Hampshire Fisher Cats, the Double-A affiliate of the Toronto Blue Jays. For

more about Canal Park and the RubberDucks, visit akronrubberducks.com.

Option 1 - Akron Glass Studio and Dinner, Wednesday, July 31

Are you up for trying a new experience? Do we have an event for you!!! Come on over to the Akron Glass Works with us and witness glass blowing up close and personal. Enjoy dinner upstairs in the newly restored sanctuary of a 1931 Presbyterian Church, photographing glass blowers (friends and family members), and shopping at the Glass Works and across the street at Don Drumm Studios. The Drumm Studios includes two extensive gallery buildings selling works by over 500 top North American artists.

Option 2 - Akron Glass Studio and Dinner with Glass Blowing, Wednesday, July 31

To enhance your excursion experience, try your hand at creating a one-of-a-kind Friendship Ball to keep or give to a special someone. You will have the opportunity to blow molten glass into a beautiful ornament in a color of your choice. This opportunity is an additional \$25 and

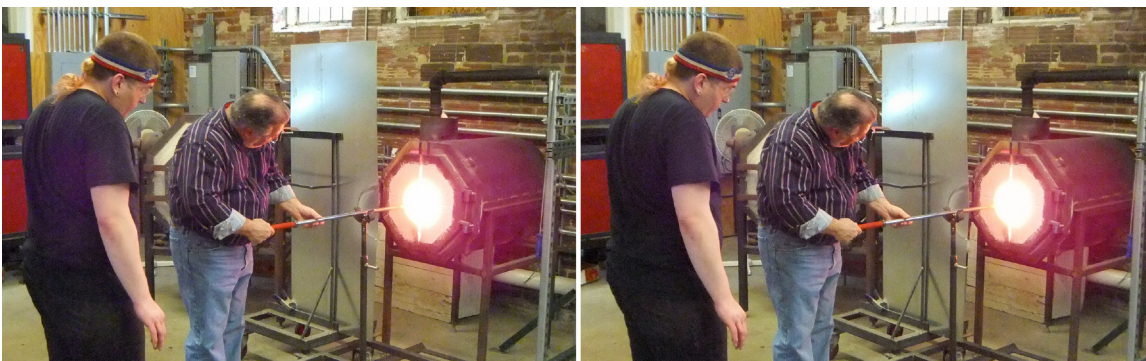
will be limited to 20 people. So sign up soon and don't miss your chance to create a special remembrance of this year's 3D-Con. For more about Akron Glass Works, visit akronglassworks.com. For more about Don Drumm Studios & Gallery, visit dondrummstudios.com.

MAPS Air Museum, Sunday, August 4

After a busy week of convention activities, relax and explore the history of flight in the state boasting the Birthplace of Aviation. Join us for a fun BBQ dinner and afterwards photograph 40+ aircraft, both inside and outside the hangar. An extensive "Gallery of Heroes" museum features a unique and rare selection of military artifacts. Many of the items in the displays were donated by Ohio veterans who served this country. A second collection is on the upper level in the Ohio Military Museum. For more about the MAPS Air Museum, visit mapsairmuseum.org.

Football, Wine, Carvings and Chocolate, Monday, August 5

Our first stop on this fun, full day tour will be at the Pro Football Hall
(Continued on page 15)



John Bueche tries his hand at glass blowing at the Akron Glass Works.
(Stereo by Barb Gauche)



Just one of the rare aircraft at the MAPS Air Museum is this Goodyear GA-22A "Drake."
(Stereo by John Bueche)



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Salmon w/ Macadamia Nut Crust	Grilled Top Sirloin	Chicken Marsala	Vegetarian
PRESIDENT'S BREAKFAST	Sunday, August 4 8:00 AM	\$25 / Ticket x	TICKETS = \$
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EXCURSION #2 – SUITE LIFE AT THE BALLPARK	TUESDAY, JULY 30 3:45 PM	\$50 / TICKET X	TICKETS = \$
EXCURSION #3 – OPT. 1 – AKRON GLASS STUDIO AND DINNER	WEDNESDAY, JULY 31 6:00 PM	\$35 / TICKET X	TICKETS = \$
OPT. 2 – INCL. ABOVE AND GLASS BLOWING	WEDNESDAY, JULY 31 6:00 PM	\$60 / TICKET X	TICKETS = \$
		CHICKEN PICATA	ROAST BEEF
EXCURSION #4 – MAPS AIR MUSEUM	SUNDAY, AUGUST 4 6:00 PM	\$40 / TICKET X	TICKETS = \$
EXCURSION #5 – FOOTBALL, WINE, CARVINGS AND CHOCOLATE	MONDAY, AUGUST 5 8:30 AM	\$75 / TICKET X	TICKETS = \$
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Exposing Muybridge

by Marc Shaffer

The photograph arrived to my office in an overnight mail envelope from Canada. The two by three inch *carte de visite* was in a plastic sleeve, sandwiched between two hand-cut pieces of cardboard held together with scotch tape, inside a paper envelope. The photograph showed a group of Native Tlingit, an Alaskan tribe, posing before a totem pole. Faded, worn around the edges, with a prominent crease running horizontally across its center, it wasn't much to look at. What made this photograph special, though, was not the picture on the front, but what was on the back: an inscription by the man who made it 150 years ago: *Helios*, aka Eadweard Muybridge.

A Horse in Motion

That Muybridge made photographs in Alaska is a barely mentioned footnote to his legendary career. What Muybridge is best known for, of course, is motion. On behalf of the California railroad baron, politician, and horse breeder Leland Stanford, Muybridge managed to do what no other photographer had yet been able to—capture something moving faster than the eye can see.

In 1872, Stanford approached Muybridge to settle a debate over whether at a full gait a horse's four hooves ever left the ground at once. Nobody knew for sure, because at that speed a horse's legs become a blur to the naked eye.

There was only one problem. In the early 1870s, cameras were sluggish machines, slower in fact than

the human eye. "(S)uch a thing had never been heard of," Muybridge told Stanford, "photography had not yet arrived at any such wonderful perfection as would enable it to depict a trotting horse at speed."¹

Nonetheless, at Stanford's insistence, Muybridge agreed to try, and after several failed attempts, finally succeeded. "(T)he pictures were little better than silhouettes, and it was difficult to distinguish, except by

photographs using stereo cameras. He believed that giving viewers the opportunity to view his images in 3-D would provide evidence that they were "faithfully taken by photography and not materially changed by retouching."³ Curiously, Muybridge never published his motion studies as stereo views. Only one stereo motion plate has ever been found, a negative excavated in 1998 from Muybridge's garden in his

hometown of Kingston, outside London.

In fact, the veracity of Muybridge's first horse sequence was widely attacked because it showed the animal moving very differently than the human eye perceived. "Scientists ridiculed it, anatomists scoffed at it and old turfmen jeered at it and aggressively maintained the impossibility of a horse ever getting itself into the position represented."⁴

That Muybridge chose not to publish stereos is

likely due to the fact that during his Stanford studies he found a better way to persuade his doubters. He invented what he called the *zoopraxiscope*, a machine that would project short movies of his motion studies, much like the GIFs of today. Rather than animate his actual photographs, Muybridge used elongated, painted facsimiles of his sequences to correct for optical distortion caused by the zoopraxiscope.

Before stunned audiences, Muybridge would begin by showing single images of a horse in an unfamiliar pose, then animate the sequence during which the horse's movement



Eadweard Muybridge No. 490, "Fort Tongass" shows a Tlingit group at Tongass Island, Alaska, August 1868. (Courtesy Mary Everson)

inference, the right feet from the left," Muybridge later recalled.² Though of poor quality, the photograph provided Stanford with the proof he needed: All four hooves could be seen to be elevated from the ground.

In 1877, Muybridge and Stanford reunited to produce the first sequences of horses in rapid motion, using an electric shutter system devised with Stanford's railroad engineers that snapped photographs at an astonishing 1/5000 of a second.

Muybridge published his motion sequences as a series of single images obscuring the fact that he made the



Eadward Muybridge in 1872, photographed before the "General Grant" giant sequoia tree in the southern Sierra Nevada mountains. Detail from an image attributed to Charles Leander Weed. (Courtesy the J. Paul Getty Museum)

appeared normal. "Nothing was wanting but the clatter of hoofs upon the turf and an occasional breath of steam from the nostrils, to make the spectator believe that he had before him genuine flesh-and-blood steeds," observed one reporter.⁵

To prove his photographs to be true, Muybridge manipulated the truth, using static, painted copies of his photographs that when projected in rapid succession created the illusion of motion in the mind of the viewer. Muybridge blurs this line between artist and scientist throughout his career, navigating the tension between reproduction and representation, objective data collection and subjective storytelling.

Capturing the West

Muybridge's motion work has largely overshadowed the first chapter of his career, when as a landscape photographer he produced one of the most important catalogues of the early American West, images ranging from Alaska to Central America, the Pacific coast to Utah.

If Muybridge's motion work reflected his technological age, his landscape work documents a time of dramatic social change—a wild Yosemite opening to tourism, the

newly globalizing coffee industry in Guatemala, a fast developing San Francisco, and an Indian War on the California-Oregon border.

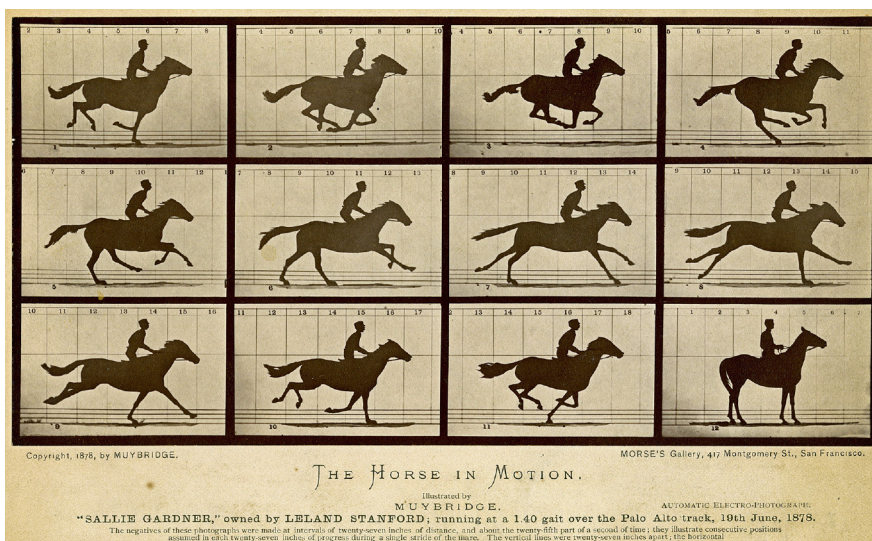
Muybridge

I first came to know of Eadward Muybridge while directing the PBS documentary *American Jerusalem: Jews and the Making of San Francisco*. In search of pictures of early San Francisco, I was invariably drawn to those by Muybridge. They were seductive, absorbing, magnetic.

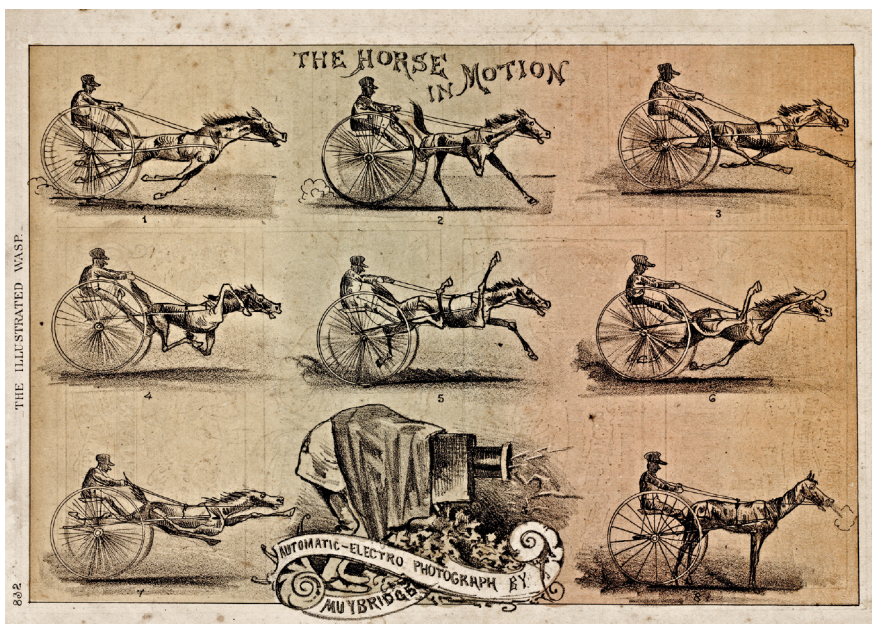
Intrigued, I began researching Muybridge, and quickly learned he

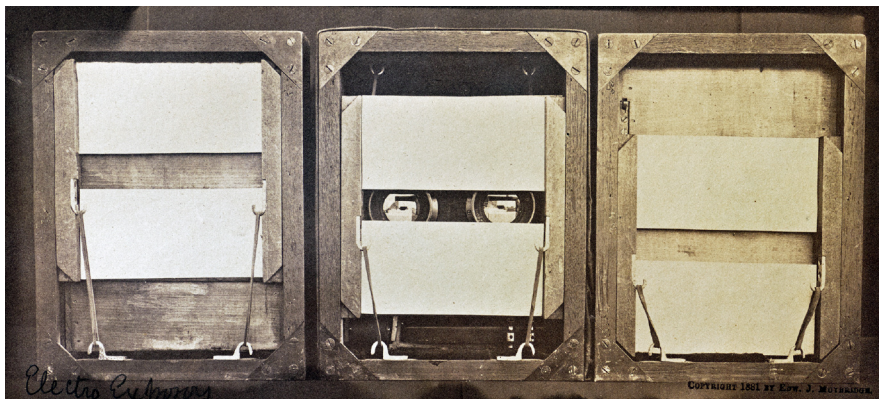
was one of the most important photographers to ever live—the subject of books, museum exhibitions, even an opera. He has been a major influence on leading 20th-century figures in art and science such as Walt Disney, George Lucas, Francis Bacon, and the Nobel chemist Ahmed Zewail, among many others. The closer I looked, the more I could see the mischievous Muybridge hiding in the shadows of our modern culture—popping up in music videos, a hit cartoon, or an old department of defense propaganda film; serving as

The Horse in Motion. "Sallie Gardner," owned by Leland Stanford was photographed in June 1878 on Stanford's Palo Alto Horse Farm, now the site of Stanford University. In 2016, *Time Magazine* named Sallie Gardner one of the 100 most influential photographs of all time. (Courtesy the Library of Congress)



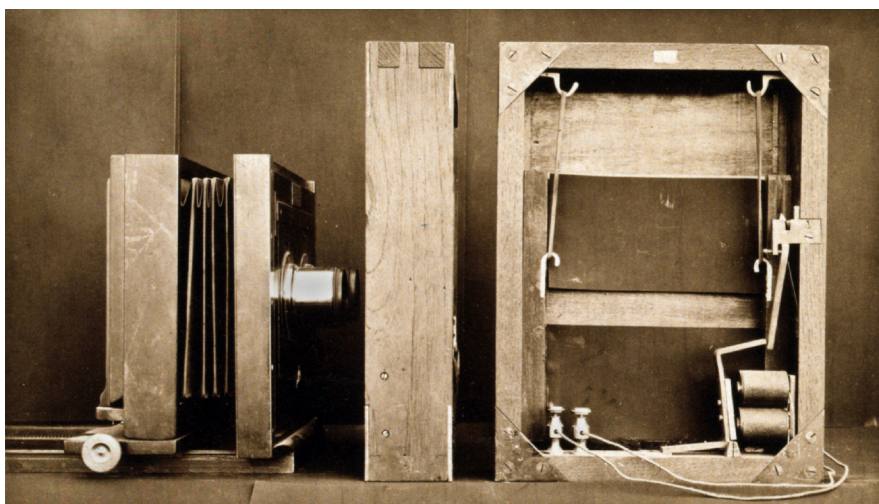
In July 1878, the weekly satire magazine *The San Francisco Illustrated Wasp* mocked Muybridge's first published photograph of a horse in motion, Stanford's trotter Abe Edgington. (Courtesy of the Iris & B. Gerald Cantor Center for Visual Arts at Stanford University; Museum Purchase Fund.)





Front view of a Muybridge camera used in the Stanford motion studies, its dual lenses visible through the open shutter. From *The attitudes of animals in motion*: a series of photographs illustrating the consecutive positions assumed by animals in performing various movements; executed at Palo Alto, California, in 1878 and 1879.

(Courtesy the J. Paul Getty Museum)



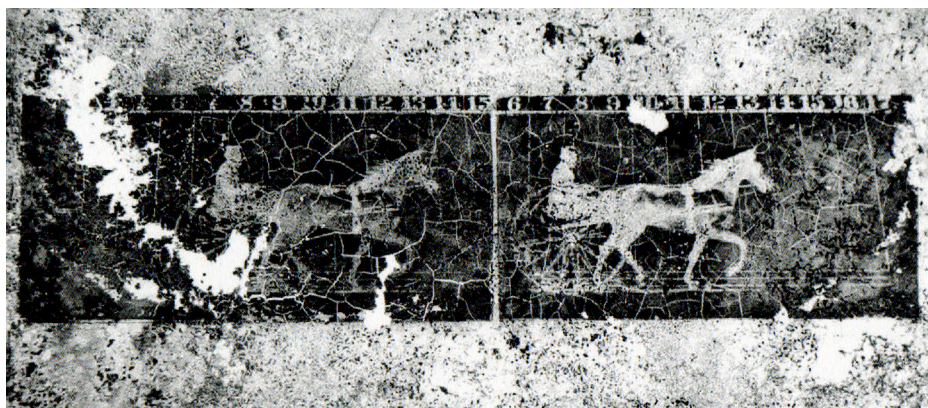
Side view of a Muybridge camera and interior of a shutter assembly used in the Stanford motion studies. From *The attitudes of animals in motion*: a series of photographs illustrating the consecutive positions assumed by animals in performing various movements; executed at Palo Alto, California, in 1878 and 1879. (Courtesy the Library of Congress.)

an inspiration for path-breaking motion picture special effects; his name gracing a career achievement award in biomechanics. I even found Muybridge's horses galloping inside

living cells, part of a breakthrough science experiment conducted at Harvard.

Muybridge's personal life was as dramatic as his professional one was

The lone stereo motion plate known to exist. (Reprinted with permission from Eadweard Muybridge: The Kingston Museum Bequest. (2004). Stephen Herbert, editor. Hastings: The Projection Box)



distinguished: he suffered a near fatal head injury after being thrown from a stagecoach; he killed his wife's lover; he was nearly destroyed in an ugly falling out with his patron Leland Stanford. [SW Vol. 39 No. 2 page 4.]

In 2013, I began developing *Exposing Muybridge* (muybridgethemovie.com), the first feature documentary on the life and legacy of the photographer to tell this extraordinary story. In the intervening years, the project has grown beyond the centerpiece documentary. We are now creating a companion virtual reality piece, a kind of homage to Muybridge, to whom the cutting-edge technology is much indebted.

Muybridge in Alaska: 1868

In the summer of 2017, I decided to organize an exhibition of original Muybridge photographs of Alaska to coincide with the 150th anniversary of their making in 1868. One of my first calls was to Leonard Walle, a member of the board of the National Stereoscopic Association and a renowned collector of stereo photographs. Len has one of the most complete original collections of Muybridge's Alaska views and he generously agreed to lend sixteen of them to the exhibition. At his suggestion, I also purchased three Twin-Scope viewers, high-quality stereoscopes invented by the artist Colleen Woolpert specifically for use with museum exhibitions.⁶

As for the *carte de visite* inscribed by Muybridge, I first found it mentioned in a book of academic essays on the Tlingit people. I tracked down the photograph's owner, Mary Everson, a Tlingit woman living on Vancouver Island. Mary happily agreed to provide the photo for the show.

Mary told me that she had inherited the photograph from her mother, Margaret Frank, the great granddaughter of Chief Andáa, believed to be the main figure pictured at center wearing the frontlet.

As a young woman, Frank had starred in the 1914 silent film *In the Land of the Head Hunters*, directed by the photographer Edward S. Curtis. In the mid 1970s, a writer named Peggy Walker, herself a former silent film actress, wrote an article about Frank and the Curtis film for the Screen Actors Guild. Somehow,



A TwinScope viewer, mounted as part of *Muybridge in Alaska: 1868*. See SW Vol. 42 No. 3 page 15.
(Photo by Marc Shaffer)



Attending *Muybridge in Alaska: 1868* at the Alaska Native Heritage Center on January 25, 2019, Tom Harris and his daughter are descendants of Tlingit people featured in Muybridge's photographs. (Photo by Marc Shaffer)



Christine Noratak appears stunned after viewing images with the TwinScope at *Muybridge in Alaska: 1868* in the Alaska Native Heritage Center.
(Photo by Marc Shaffer)

Walker had come into possession of the photograph. Walker gave the picture to Frank.

For many Tlingit, especially those related to figures in the photographs, Muybridge's stereos are a cherished connection to the past. "When I see this picture, I see the woven tunics and I know which clans the people were from," Everson says. "It's history in a photo."

Muybridge in Alaska: 1868 premiered in January, 2019 at the Alaska Native Heritage Center in Anchorage.

Journey to Alaska

On July 29, 1868 Muybridge departed for Alaska aboard the steamship *Pacific* as part of an expedition led by Major-General Henry W. Halleck, commander of the U.S. Military Division of the Pacific. On August 13, the *Pacific* crossed into Alaska, docking at Tongass Island, where the U.S. was constructing a

fort. It continued north to Wrangle (now Wrangell), site of another new military base, before reaching Sitka, the U.S. capital, on August 18. The expedition spent a total of two weeks in Alaska.

Working in the collodion wet-plate process of his day, Muybridge had to bathe each glass plate in a chemical solution just prior to exposure and then immediately develop the exposure. Muybridge transported his equipment in a horse-drawn carriage he dubbed *The Flying Studio*, which also served as his darkroom.

"Helios Rampant" is how a reporter on the expedition described Muybridge. "Helios ... had come to Sitka with dismal forebodings that the fog would so obscure the face of nature

as to render his art valueless; but now he had struck a streak of sunshine and was determined to make pictures while it lasted. With shirt-sleeves rolled up, and hair on end, he trotted his flying studio through the town while the daylight lasted, and was enabled to get a number of excellent views."⁷

Muybridge's photographs were the earliest of Alaska to be commercially distributed, providing the general public with its first visual impression of the new American territory. They were also the first to be made of Tlingit people and of Sitka and the southeast.⁸

Muybridge was commissioned to photograph military forts and harbors, but went far beyond this narrow mandate. Of his 39 published

Eadweard Muybridge No. 1385, "Contemplation Rock, Glacier Point." Yosemite, 1872. Published by BRADLEY & RULOFSON. Muybridge boasted that he took "considerable risk to his personal safety" to produce "the best pictures." (Courtesy California Historical Society)



1385—Contemplation Rock, Glacier Point.

(This image only available in the printed version of this issue.)

views, the most compelling are of people.

Halleck liked the pictures, and told Muybridge so. "These views, besides being beautiful works of art, give a more correct idea of Alaska, its scenery + vegetation, than can be obtained from any written description of that country."⁹ If manifest destiny served as the ideology of U.S. expansion, and economic opportunity its motive, then new technologies provided the engine. The telegraph, train and steam powered ships shrank time and space, pulling once

Eadweard Muybridge No. 480, "Fort Wrangle" from Rock Cod. at Wrangell, Alaska, August 1868. Published by Cosmopolitan Gallery of Photographic Art, San Francisco.

(Courtesy Leonard A. Walle)

remote locales like Alaska within easy reach. "Mail and telegraph communications will very soon be established between Sitka and San Francisco, and thence with all parts of America, Europe and Asia," Halleck wrote in December 1867. "With these facilities for trade and commerce with other parts of the world, this new territory must soon become, what nature intended it to be, and

what it has frequently been called "The New England of the Pacific."¹⁰

Tlingit Chief Andáa, believed to be the figure wearing the frontlet near the center of Muybridge No. 490.

Eadweard Muybridge No. 490, "Group of Indians." A Tlingit group at Tongass Island, Alaska, August 1868. Published by BRADLEY & RULOFSON. The left image of this view was used for the carte de visite shown at the top of this article. (Courtesy Leonard A. Walle)

(This image only available in the printed version of this issue.)

(This image only available in the printed version of this issue.)

Eadweard Muybridge No. 479, "Group of Indians" at Sitka, Alaska, August 1868.
Published by EDW. J. MUYBRIDGE, San Francisco. (Courtesy Leonard A. Walle)

The camera played a vital role, too. Photographs fed the public's imagination, inviting viewers to venture west to the new frontier. Muybridge's first photographs, made in 1867, were commissioned to promote tourism in Yosemite Valley.

Regarding Alaska, Muybridge's views helped counteract the widely held belief that the territory was a frozen wasteland, its purchase (Secretary of State William) *Seward's folly*. "California photographers are doing a good service in many ways by their enterprise in landscape work, which

is making familiar in the parlors of the nation some of the finest scenery in the least explored parts of the Union," a San Francisco newspaper wrote in 1868. "Muygridge (*sic*) brings us Alaska in a portfolio of sun pictures that give us a very favorable opinion."¹¹

In his 1873 catalogue, Muybridge lent his own endorsement to the acquisition. "Until the purchase of this territory, (the farthest west of

our country,) by the United States, at the instance of that far-seeing statesman, William H. Seward, Alaska was scarcely ever heard of, excepting by the fur merchant and geographer, and even now the most erroneous ideas prevail, both with regard to its climate and resources... The entire coast line is a succession of beautiful scenery."¹²

For Alaska Natives, like the Tlingit captured by Muybridge's camera, the story was very different. The U.S. had invaded their home, which had belonged to them since "time imme-

Eadweard Muybridge No. 472, "Russo Greek Priests" at Sitka, Alaska, August 1868. Published by Cosmopolitan Gallery of Photographic Art, San Francisco. (Courtesy Leonard A. Walle)

(This image only available in the printed version of this issue.)

(This image only available in the printed version of this issue.)

morial." They had neither been consulted on the sale nor received anything from it. To the contrary, they had been stripped of their sovereignty.

To prevent Native resistance, the U.S. ruled with military force. "A firm and just administration has a more important influence over savages than is usually supposed," Halleck wrote upon his return from Alaska. "By establishing military posts in the vicinity of the larger tribes or villages,

Eadweard Muybridge No. 488, Fort Tongass, View from the Fort." Photographed at Tongass Island, Alaska, August 1868. Published by BRADLEY & RULOFSON, San Francisco. (Courtesy Leonard A. Walle)

a salutary influence is soon obtained over them... In this way, the whole country will be gradually opened to our settlers and traders, without the danger of hostile collisions. They will thus learn that our Government is able and ready to *compel* them to good conduct."¹³

Within months of Muybridge's visit to Sitka, a clash between Tlingit

and U.S. soldiers ended in the death of several Tlingit. In December 1869 at Fort Wrangell, the U.S. bombarded the neighboring Tlingit village of Kaachx an.áak'w for two days before publicly hanging the village shaman.¹⁴ In his photographs, Muybridge only hints at this version of the story—a cannon points over the harbor at Fort Tongass. In Sitka, a U.S. soldier, perfectly centered, looms over a group of Tlingit.

The English-born Muybridge is visiting Alaska for the first, and only,

Eadweard Muybridge No. 478, "Group of Indians" at Sitka, Alaska, August 1868. Note the soldier standing over the group at center. Muybridge's pseudonym Helios appears at bottom right, almost correctly aligned for stereo. In some other views, it's hidden among tiny details like rocks, etc. Published by Cosmopolitan Gallery of Photographic Art, San Francisco. (Courtesy Leonard A. Walle)

(This image only available in the printed version of this issue.)

time. He is there to serve the U.S. War Department, and by extension to promote the U.S. purchase. He is making views he plans to sell to Euro-American consumers who know nothing of the territory. It shouldn't surprise, then, that his client, General Halleck, would consider Muybridge's version of Alaska "correct" or that his images would lead a San Francisco newspaper to a "very favorable opinion" of Alaska.

Which brings us back to Mary Everson's *carte de visite*. Surrounded, as Muybridge is, by unabashed racism towards Native Alaskans, the inscription on the back is striking. It reads: "To the brave and noble chief of the Tongass, with Helios' respect."

Exhibition Details

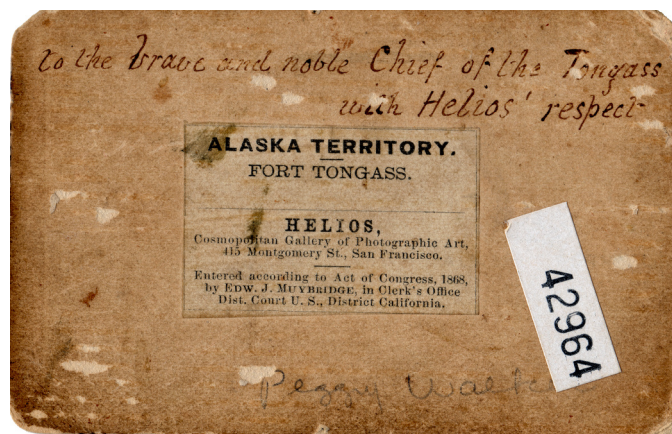
Muybridge in Alaska: 1868 will continue its exhibition tour at the Sheldon Museum in Haines, Alaska from April 5 to May 31, 2019. Discussions are underway to mount the show in Sitka, and possibly other locations. Check tinyurl.com/y3624z6q for the most current information.

About the Author

Marc Shaffer is a documentary filmmaker in Oakland, California. For more information on *Exposing Muybridge*, please visit muybridgethemovie.com. While there, please consider making a donation to help us produce the film.

Acknowledgments

I wish to thank the Everson family for sharing the rare inscribed photograph and Len Walle for lending his collection of views for the exhibition and this article. Len has been especially supportive of the project throughout, for which I am grateful. I also want to acknowledge our growing community of underwriters: the National Endowment for the Humanities, the Atwood Foundation, the Donald and Doris Philanthropic Fund, the Nathan Shaffer and Lauri Markowitz Fund, California Humanities, Nion McEvoy, Ruth Bley, the Fisher Foundation, the Rasmuson Foundation through the Harper Arts Touring Fund of the Alaska State



Eadweard Muybridge No. 490, back of the *carte de visite* Photographed at Tongass Island, Alaska, August 1868 and inscribed "To the brave and noble chief of the Tongass, with Helios' respect." (Courtesy Mary Everson)

Council on the Arts, Zoon Engineering, the Alaska Humanities Forum, and others.

Notes

1. Leland Stanford's Gift to Art and to Science, Mr. Muybridge's Inventions of Instant Photography. (February 6, 1881). *San Francisco Examiner*.
2. Muybridge, Eadweard. (1893). *Descriptive Zoopraxography*. Chicago: Lakeside Press.
3. More Photographs of "Occident." (August 11, 1877). *Daily Alta California*.
4. Leland Stanford's Gift to Art and to Science, Mr. Muybridge's Inventions of Instant Photography. (February 6, 1881). *San Francisco Examiner*.
5. The Zoogyroscope, (May 5, 1880) *San Francisco Call*.
6. <https://colleenwoolpert.com/TwinScope-Viewer>

7. Going to Alaska. Among the Northern Indians—Painted Savages with Modern Civilization—Mineral indications—Morning at Sitka—Not a Fur Country—Concerning Indians—Indian Incrementation—Is Alaska a Good Bargain? (September 11, 1868), *Daily Alta California*.
8. In 1866, Charles H. Ryder made a set of unpublished photographs of the Russian post of St. Michael, on the Norton Sound, as part of a Western Union Telegraph Company survey expedition. SEE: Palmquist, Peter E. and Kailbourn, Thomas R. (2002). *Pioneer Photographers of the Far West: A Biographical Dictionary, 1840-1865*, p. 470. Stanford, CA: Stanford University Press.
9. Letter from General Henry Halleck to Muybridge dated October 13, 1868.
10. THE CESSION OF ALASKA, Gen. Halleck's Official Instructions to Gen. Jefferson C. Davis, the New Commander. (December 12, 1867). *The New York Times*.
11. *Daily Evening Bulletin*. (October 9, 1868). Cited in Braun, Marta. (2010). *Eadweard Muybridge*. P. 52. London: Reaktion Books.
12. Muybridge, Eadweard. (1873). *CATALOGUE of Photographic Views Illustrating The Yosemite, Mammoth Trees, Geyser Springs, and other Remarkable and Interesting Scenery of the Far West*. San Francisco: Bradley & Rulofson.
13. Halleck, Henry W. DIVISION OF THE PACIFIC. Official Report of Major General Halleck. (December 14, 1868). *Daily Alta California*.
14. Jones, Zachary. (July, 2015). The 1869 Bombardment of Kaachx an.áak'w from Fort Wrangell: U.S. Army Response to Tlingit Law, Wrangell, Alaska. Washington DC: National Park Service, American Battlefield Preservation Program; Juneau, AK: Sealaska Heritage Institute.

2019 3D-Con Excursions (Continued from page 6)

of Fame allowing you two and a half hours of exploring the shining tribute to those who have made professional football America's most popular sport. The Hall has many interactive displays that give you a feeling of what it is like to play the game. Explore the large hall with bronze busts of all the enshrines. The stunning display of rings created for the Super Bowl champions will dazzle you. For more about the Pro Football Hall of Fame, visit profootballhof.com.

Lunch will be provided at the beautiful Gervasi Vineyard, our next stop on the tour, and will include a wine tasting and winery tour. Photography is permitted everywhere on the grounds, except during the winery tour. Don't be discouraged, though, the grounds are stunning

and offer great photo ops. For more about Gervasi Vineyard, visit gervasivineyard.com.

Our next stop will be at the fascinating Warther Museum showcasing over 64 hand-carved pieces made of ebony, ivory and walnut. Teaching himself how to whittle and carve, Ernest "Mooney" Warther, born to Swiss immigrant parents, carved very intricate steam engines, a working steel mill and the Lincoln Funeral Train. One of his earliest works was a pair of working pliers carved out of a single block of wood. For more information about the Warther Museum, visit thewarthermuseum.com.

On the way back to the hotel, we will make one more stop at the Harry London/Fannie May

(Continued on page 28)

Bigger is Always Better!

When presented with two apples the normal human reaction is to choose the larger of the two. We are genetically inclined to select *bigger*! This holds true for almost everything that we don't know well—the bigger the better!

Television screens started out at five diagonal inches in 1939 using cathode ray tubes (CRT). It wasn't long before 21" and even 28" screens were available. The first true NTSC color TV, the RCA CT-100, also a CRT, had a picture of only 15" diagonally.

By the turn of the 21st Century flat screens had replaced most of the CRT televisions with sizes ranging from your cell phone (5" or 6") to 55" diagonal and more. Soon flat screens of 65", 77" and 85" were available with a quickly rising price to match. If you had the room in your house and could afford a front projection system the sky was almost the limit. Screens of 100" diagonally and even more are common in such installations.

Three-dimension television receivers were introduced in 2010 at the Consumer Electronics Show (CES) and were most popular in 2013 before declining. The active glasses were a pain to use and the passive sets were (falsely) accused of insufficient resolution. Production of 3-D TVs stopped in 2016 but 3D Blu-ray discs are still being released. Most of the 3-D TVs were of the larger variety; 55" to 77". The larger sizes made the 3-D picture more enjoyable as an

almost theatrical experience. Of course, a good sound system contributed to the experience to a large degree as well.

In 1897 the *Corbett-Fitzsimmons Fight* was filmed using a 63mm 1.66:1 film format called Veriscope by a company with the same name. The camera was a huge room-like structure with red windows and three apparatuses with operators *inside* photographing the fight. The film of the day was insensitive to red light so the operators could keep

It was in limited use until 1931 but with the Great Depression looming the timing was not good and very little product was produced (and less exhibited) in the process. One film produced in Grandeur 70 was *The Big Trail* (1930) directed by Raoul Walsh, it was the first movie where John Wayne played a starring role. Another negative factor for the process was that only two theaters were capable of playing back a 70mm Grandeur 70 film; Grauman's Chinese Theater in Los Angeles and

the Roxy Theatre in New York City. Other cities showed 35mm prints of the same films because they couldn't afford the 70mm projection equipment. [See SW

Vol. 44 No. 1 page 2.]

Fred Waller was born in 1886 at the height of screen size experimentation. He was known for film special effects at Paramount Pictures and invented Vitarama, an 11-projector spectacle, for the 1939 New York World's Fair Time and Space Building. He later refined that concept to invent the 5-projector, Waller Gunnery Trainer, for World War Two. But the invention he is most remembered for by film buffs is Cinerama.

On September 30, 1952, Waller, along with Hazard Reeves, Mike

Home Theater 3-D

3-D Video for your Living Room

by Lew Warren

watch on the film with the red light from the windows. The edited film was shown with an electrically operated projector. It ran about 100-minutes and no other films were produced in this pioneering process. It is, however, considered to be the birth of the feature film.

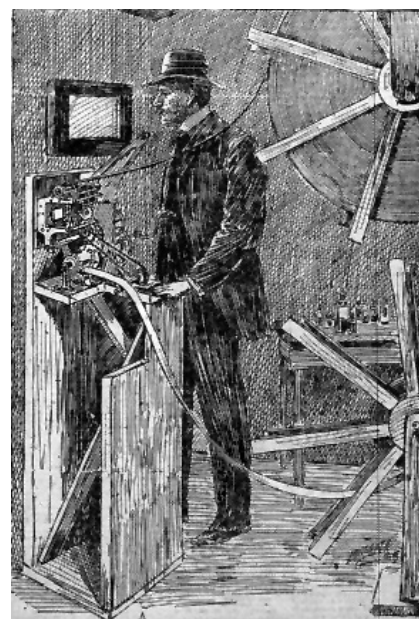
In 1900 Raoul Gimoin Sanson demonstrated Cinéorama, a 70mm 10 camera 360-degree circular thrill ride for the Paris Exhibition. It surrounded the audience in a gondola making them feel as if they were in a hot-air balloon floating above Paris.

A camera that shot two films side-by-side, for an image that was twice as wide as normal, was called Widescope and was tried in 1922. The camera had two lenses, one above the other, and the films were exhibited by two projectors connected by a universal joint. This precursor to Cinerama suffered from the join line being right in the middle of the screen.

In 1926 George K. Spoor and P. John Berggren produced short subjects (*Niagara Falls* and *Rollercoaster ride*) in Natural Vision using a 63.5mm film with a 2:1 aspect ratio camera negative and projection print. The last reel of Abel Gance's 1927 silent epic, *Napoleon*, was shot and projected in 3-screen widescreen, called Polyvision.

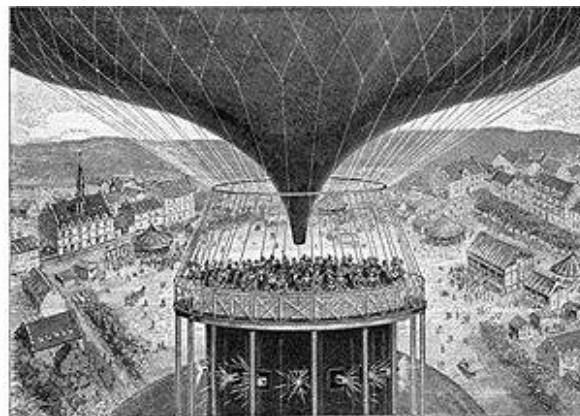
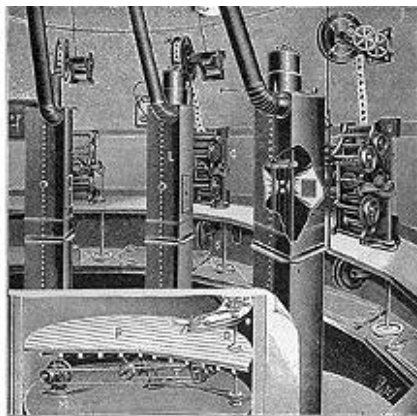
During 1929 the Fox Film Corporation introduced Grandeur 70, a 70mm camera and projection format.

Inside the 1897 Veriscope camera.



The 1939 Andrea 1F5 television receiver.





Cameras, projectors and seating for the 1900 Cinéorama 70mm, 10 camera, 360-degree circular thrill ride for the Paris Exhibition.

Todd, Merrian C. Cooper and Lowell Thomas premiered *This Is Cinerama* at the Warner Theater in New York City. The feature was mostly a travelogue with some very involving sequences including the introductory roller coaster ride! It became a must-see motion picture "event" for several years and spawned seven "sequels."

Cinerama (cinema plus panorama) used three interlocked cameras and three interlocked projectors on a deeply curved 146-degree screen. The screen used narrow strips of screen material facing the audience at the two extreme edges of the screen to eliminate reflections from one side of the screen to the other. The sound system was a seven-channel stereophonic system invented by Hazard Reeves. There were five channels behind the screen and several speakers on the sides and back of the theater. A sound engineer controlled the direction of the surround sound from a script provided with the film. The two join lines for the three images were disguised with sawtooth faders at the edge of the frame gate in all of the projectors. Camera operators also hid them on trees, fence posts and other vertical objects.

The cameras used 27mm lenses to approximate the human eye and give the 146-degree field of view which led to the illusion of depth for the image. Six of the Cinerama films were travelogues and two were scripted dramas; *The Wonderful World of the Brothers Grimm*, and *How The West Was Won*. The last film shot (mostly) in the 3-camera original Cinerama was *How The West Was Won* in 1962. Succeeding "Cinerama" movies were shot in Ultra Panavision 70 and Super Technirama 70 with a

few exceptions. Even *How The West Was Won* used Ultra Panavision 70 for the river rafting sequence.

You can get the feeling of the wide screen Cinerama in your home theater by obtaining the Blu-ray versions of *This is Cinerama*, 2012 (60th Anniversary edition) and/or *How The West Was Won*, 2008 in the Smilebox versions. "Smilebox" simulates a curved screen, especially effective if you can sit close to your television screen. The original seven-channel sound is also reproduced on the discs in digital audio as close as possible to the original soundtrack.

CineMiracle, a similar, three-camera and three-projector competitor to Cinerama only produced one film, the documentary *Windjammer*. The only difference was that in Cinerama three projector booths around the theater were needed while CineMiracle put all three projectors in one booth at the back of the theater. *Windjammer* is also available on Blu-ray in the Smilebox version.

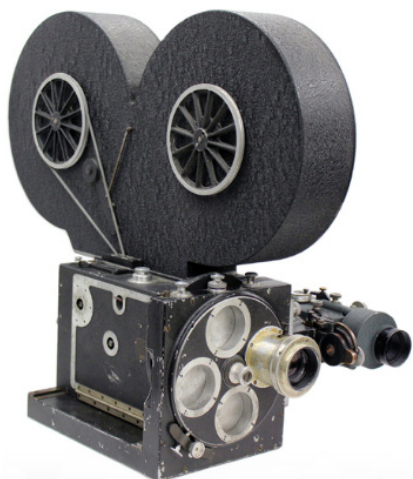
The Cinerama process involved a huge amount of reconstruction of the exhibiting theaters for the vast 146 degree wide and very deep screen plus three new projection booths on the ground floor directly facing the screen. In addition, five speakers behind the screen and several surround speakers had to be installed and wired to the audio booth which used 35mm magnetic film synchronized to the three interlocked projectors by a specially trained technician at each performance. The result was that only one theater in a few major cities could afford the reconstruction. Initially the investment paid off royally. Several new theaters were constructed for the exclusive showing of Cinerama features. The Cooper chain built Cinerama theaters in Denver, St. Louis and its home base of Omaha. With the decline of very wide movies and the rise of multiplexes in the suburbs all three theaters were subsequently demolished.

In 1953 three-dimensions and very wide screens seemed to be the answer to the movie studios' fears

A production stereo from the 1930 70mm widescreen film *The Big Trail*. Perched on a steep hillside, the crew stands near the Grandeur 70 camera with its wide film magazine. Behind it may be a standard 35mm camera shooting the "normal" release format. (see SW Vol. 29 No. 3).

(Stereo by Alexander Kahle)





Possibly the camera seen in the Alexander Kahle stereo (see previous page) shooting *The Big Trail*, this is a 70mm Mitchell FC, serial #8, currently for sale under "vintage" at cinemagear.com/mitchell_fc.html#nogo where much more about the camera, the format and the film is provided.

concerning the advancement of television in the home, but 3-D faded fast because of projection problems and Cinerama was limited due to the size of the screen necessary and the subsequent cost. Another wide-screen process was desperately needed for the studios and the smaller theaters.

French inventor, Henri Chretien, in 1926 used a lens system that squeezed the image horizontally for the camera and unsqueezed it for a projector, a lens process called Hypergonar. He called his iteration Anamorphoscope. When Cinerama bucked the trend of declining movie attendance, Spyros Skouras, the head of the 20th Century Fox film studio asked his staff to find a less expensive and easier to install wide-screen system. After some research they contacted Chretien and bought all his lenses and patents and called it CinemaScope.

The first film in CinemaScope was *The Robe* in 1953. It actually used some of Chretien's adaptors. Fox contracted with Bausch & Lomb to make more camera adaptors and also projection lenses and adaptors. The beauty of the system was that the old standard 35mm cameras and many of the lenses could be used with the CinemaScope adaptor. The same was true for the theater projector. All the theater operator needed was a new wider screen and two adaptor lenses for his projectors. For

the full effect they needed to add three speakers behind the screen and a few around the auditorium plus more amplification for the four-channel stereophonic sound.

In 2008 Fox released a Special Edition of *The Robe* on Blu-ray disc with commentary and special features about the significance of the first CinemaScope motion picture and the anamorphic process itself. The sound on this disc is DTS-HD 5.1.

Since Fox owned the copyright and patents for CinemaScope, with a trademark on the name, other studios had to find their own wide-screen processes. Some licensed the name and the process from Fox and others tried their own version, i.e. WarnerScope. CinemaScope was eventually replaced by Panavision with improvements in optics and cameras.

Other widescreen variations at this time include CinemaScope 55 (Fox) introduced in 1955 with a 65mm camera negative for greater resolution and 35mm release prints. Panavision 70, Ultra Panavision 70 (slightly anamorphic) and Todd-AO (Mike Todd Company with the American Optical Company) used 65mm camera negative with 70mm exhibition prints (the extra width was for the multi-channel magnetic surround sound with the picture

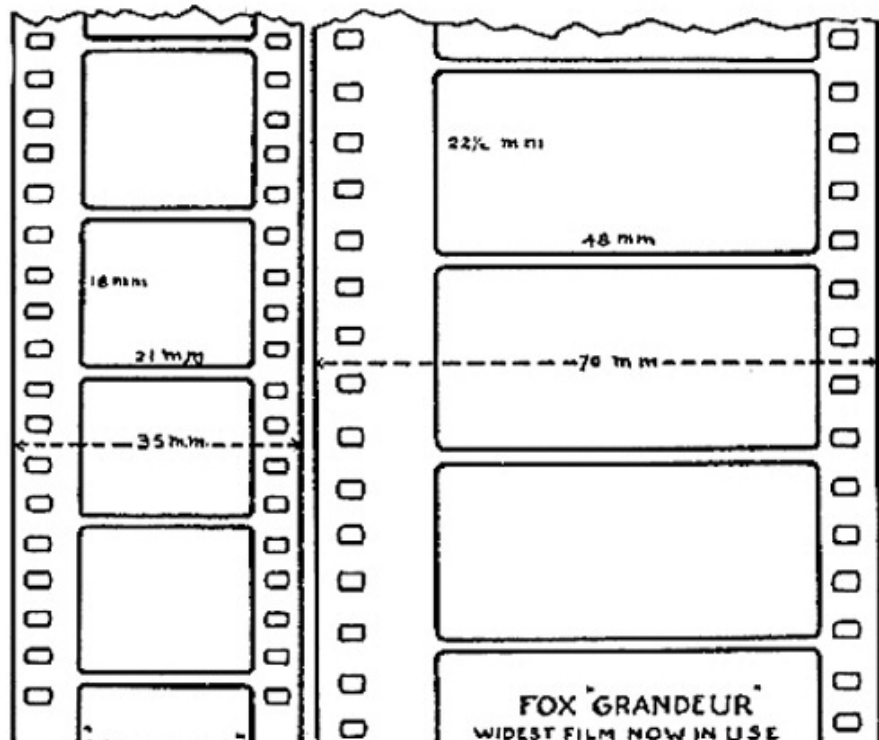
slightly reduced to accommodate all six tracks).

Dimension 150 used a wide-angle lens on the camera projected on a Cinerama or other very wide screen. Only two films were ever made in that process, *The Bible*; *In The Beginning*, and *Patton*.

Paramount came up with a refurbished 20-year-old color camera process of their own and called it VistaVision. The first VistaVision movie was *White Christmas* in 1954 and is also available on Blu-ray. In VistaVision the 35mm film was run horizontally through the camera as opposed to the vertical movement in regular cameras. This made the negative twice as large as the normal camera negative and allowed for the projection of at least three recommended aspect ratios. The image was also sharper with finer grain. As film stocks improved this advantage faded over time. After that VistaVision cameras were used for some special effects and background shots for years.

The horizontal movement of the film inspired the engineers at IMAX for their 70mm cameras and projectors. During the Expo 67 in Montreal the National Film Board of Canada presented two multi-screen films; *In the Labyrinth* and *Man and the Polar Regions*. Both films encountered

Frame size comparison published by Fox in 1930 to promote *Grandeur 70*.



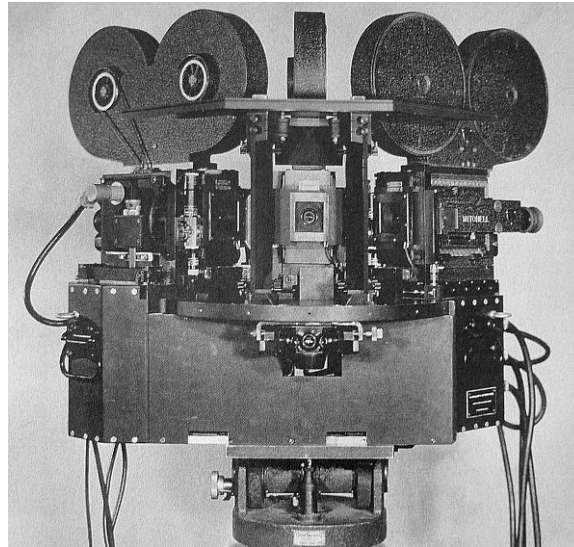
technical difficulties during exhibition which led to the founding of a company called "Multiscreen" the precursor of IMAX. The first IMAX film was *Tiger Child* presented at Expo 70 in Osaka, Japan. The first permanent IMAX theatre was the Cinesphere theatre at Ontario Place in Toronto, Canada in 1971.

The whole philosophy of IMAX from the beginning has been "bigger is better!" In technical terms the IMAX film format has six times the negative area of 35mm film vastly increasing the resolution of the IMAX film. This extra resolution was necessary to fill the enormous screens in the dedicated IMAX theatres. Beginning with Expos and expanding mostly to museums and educational institutions there were 299 dedicated IMAX theatres worldwide by 2007.

In 2008 IMAX introduced digital IMAX using two digital projectors (to double the brightness) to project onto a 1.90:1 aspect ratio screen. This was in order to partner with traditional multiplex cinema exhibitors by using a screen larger than most cinemas but smaller than the regular IMAX screens. The added size, resolution and brightness made IMAX showings of blockbuster films more attractive to movie patrons even with an added cost per ticket.

From the beginning IMAX produced the films to fill its theatres. Documentaries and travelogues that played well in the museums and educational institutions have been the main IMAX fare. By my own count there are at least 20 IMAX 3D specialty films available on Blu-ray 3D of the more than 36 produced in 3-D by IMAX. Everything from *Dolphins and Whales to Space Station* and much more are available for your 3-D enjoyment in your personal home theater.

IMAX developed their own cameras first for 15/70 film (15 perforations or sprocket holes per frame on 70mm film) then for IMAX Dome (formerly OMNIMAX) productions in 1973. IMAX 3-D cameras were born in 1985 using dual 15/70 film. IMAX



Cinerama camera array of three 35mm Mitchell cameras, looking into the central camera.



Poster for *The Robe* (1953), promoting the fact that no glasses were needed for the flat but wide Cinemascope process.

Dome 3-D started in 1990. In 2011 IMAX announced the 4K IMAX/Phantom 3-D Digital Camera. This new camera comes closer to matching the perceived 12K resolution of 15/70 IMAX film. Film is still the main recording medium but the digital camera is lighter in weight and smaller than its film counterpart so is used where size and weight are bigger factors such as in space. Films must be transferred to digital to play in digital IMAX theatres.

The glasses for IMAX 3D are linearly polarized as opposed to the circular polarization of Real D 3-D glasses. You must keep your head straighter up and down with the linear polarization. Also, the IMAX 3D glasses won't work with your passive 3-D television set like the Real D 3-D glasses do. I can't find any justifica-

tion for the linear polarization of IMAX and haven't gotten an answer yet from IMAX themselves. The IMAX 3-D glasses are also larger to cover the much larger screens of IMAX films.

Several blockbuster film directors have used the IMAX/Phantom camera for scenes in their films. To date no movie has used the digital IMAX for the entire film. Many theme park rides use IMAX technology to enhance the ride experience. One such ride is the *Soarin' Over California* ride at Disneyland park in California and *Soarin' Over America* at Disney World in Florida. *Soarin'* was shot on film in the IMAX 17/70 format filmed and projected at 48 frames per second. Recently both films have been replaced with *Soarin' Around The World*.

For films that included IMAX footage those scenes exhibit a larger picture when exhibited in the digital IMAX theatres. When these films are released on Blu-ray they are shown in the 2.40:1 letterbox theatrical ratio and when the IMAX sequences come up that scene is shown in the full 1.78:1 (16/9) HDTV frame making it appear larger. The first such movie to use this technique was *Transformers: Age of Extinction*. The aspect ratio change is barely noticeable as it is happening on the screen. Since

then other blockbusters have released "IMAX Editions" for their films.

For around one to two-million dollars (the price varies by country and preparedness of the home theater) IMAX Private Theater will come out to your home and working with your architects install an IMAX screen and associated IMAX audio and 4K-video equipment. It will be smaller than a regular IMAX theater, of course, but larger than most home theaters and is guaranteed to give the same sensations of sight and sound. They even monitor your theater's performance 24/7/365 for five years to ensure that IMAX standards are still being met. I'm saving my pennies!

If you had moved quickly, back in 2009 (or 2012), and didn't have the

THE IMAX® COMPARISON feat.

FROM DIRECTOR J.J. ABRAMS
STAR TREK
INTO DARKNESS
IN THEATERS AND IMAX WORLDWIDE THIS MAY

REGULAR CINEMA SCREEN (35mm/2K/4K)
10.3m x 4.3m (2.40:1) in this example



6-FOOT (183cm) MAN

IMAX MPX DIGITAL (2x 2K) SCREEN
e.g. here - ODEON IMAX GREENWICH - 15.7m x 7.75m (1.9:1)



SAFE AREA FOR NON-IMAX SHOT SCENES (2.40:1)

IMAX GT (70mm FILM) SCREEN
e.g. here - BFI IMAX (presented by ODEON) - 26m x 20m (1.43:1)



SAFE AREA FOR NON-IMAX SHOT SCENES (2.40:1)

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IMAX aspect ratio comparison using a frame from the 3-D feature Star Trek Into Darkness (2013).

million dollars (or more) for the IMAX Private Theater you could have considered the IMAX-like T.O.O.B. (Think Out Of Box) dome simulation. For only \$1,400 you could have acquired the three by six foot dome plus an 18-inch specially shaped mirror. You had to supply the video projector and sound system and only two people could get the feeling of sitting in an IMAX Dome theater in the indoor version. An eight by sixteen foot outdoor model was available for rent. It was an interesting idea that just didn't pan out.

If you can't afford an IMAX Private Theater, and don't fancy the T.O.O.B. experience, you can still partake of much of the IMAX theatre picture and sound with a new *IMAX Enhanced* experience for "only" several thousand dollars. The plan, announced at the 2018 Custom Electronic Design and Installation Asso-

The IMAX-like T.O.O.B. six foot dome simulation.



ciation (CEDIA) conference last September in San Diego, puts IMAX and DTS together as technology partners. A further demonstration is planned for the CES (Consumer Electronics Show) in early January 2019 in Las Vegas.

According to the website imaxenhanced.com "IMAX Enhanced is a new licensing and certification home entertainment program. To qualify and carry the IMAX Enhanced logo, the highest-end TVs, projectors, sound bars, and A/V receivers must meet stringent performance standards established by IMAX, DTS and Hollywood's leading colorists in order to create a consistent and higher bar for image and sound performance on premium devices. IMAX digitally re-mastered content for the home environment is created to provide the sharpest 4K HDR images and powerful sound as the filmmaker intended."

Device partners include Sony, Sound United LLC (Denon and Marantz) and Arcam. Studio partners are Sony and Paramount. The process will result in new equipment

capable of automatically recognizing the IMAX Enhanced Mode and switching output to take advantage of the new standard. The video will properly display the 4K UHD HDR images from 4K Blu-ray discs especially encoded with the IMAX proprietary mode on monitors or projectors equipped with the mode. Otherwise the discs will be backward compatible to show on current high-end equipment.

The sound will utilize the services of the best Hollywood sound engineers and a variant of the DTS:X codec to deliver the IMAX volume and pin-point placement. The IMAX Enhanced program currently does not have requirements for speakers other than they must be full range (20HZ to 20kHz) and perform at ear shattering levels from at least eleven locations around the viewing area.

So far 3-D is not mentioned in the specifications but might be included at a later date. Since 4K UHD Blu-ray discs have no 3-D requirement and 4K HDR is the optimum display technology today it is natural for IMAX to want that as a starting point.

Keep in mind that there are other "extreme size screen" theaters like AMC ETX (Enhanced Theatre eXperience) and Regal RPX (Regal Premium eXperience), Cinemark XD (eXtreme Digital) and others. Almost all of them feature a custom environment with luxurious seats, a giant immersive screen, digital projectors (2-D and 3-D) and state-of-the-art

(Continued on page 28)

Contributor Lew Warren has an extensive background in stereoscopic photography and display, with over thirty years experience in television. His experience as station general manager included oversight of the engineering department and the conversion to digital of a UHF station in Southern California. He has a continued interest in stereoscopic images and new technologies for viewing of those images, including 3-D Television.

View-Master at 80

Still Alive but Hanging On by a Thread

by Sheldon Aronowitz

I attended the February 2019 Toy Fair at the Javits Center in New York City and was hoping to find some good news about View-Master from its present owner, Basic Fun – The Bridge Direct.

When I did not see any presence of View-Master at the front of the booth I became worried that View-Master may be no more. But I searched within the booth and saw the View-Master display. It was small, but it was there! This is the first time in the six years or so that Basic Fun did not showcase View-Master at the front of their booth. (There was actually a photo of a child looking through a View-Master viewer at the front of the booth which I failed to notice.) For the first two years it seemed like all they sold was View-Master, as their display was quite prominent and extravagant, displaying both their many current View-Master items as well as the many prototypes of proposed projects. As the years went by the display became smaller and smaller—but was always at the front entrance to the Basic Fun booth.

The only items on display, and the only items currently available, are the three-reel Discovery box set with viewer and the four different “Discovery” two-reel blister packs with viewer. Titles are *Space Exploration*,



Barbara Oddette with the Endangered Species “Discovery” two-reel blister pack in the Basic Fun booth.

Dinosaurs, Safari, and Marine Life. The one new addition to the line is the fifth “Discovery” title—*Endangered Species*. I looked through this set—and the images are quite well

done—very nice conversions—a very impressive set indeed!

The executives did not rule out additional titles or products—but it seems unlikely that there will be any new View-Master items in the near future. They are pleased with the sales of View-Master. They market the View-Master line through Schylling Toy Company as well as selling on Amazon. There are no big-box stores such as Target, Wal-Mart, etc. presently selling View-Master but there are many “Mom and Pop” stores purchasing View-Master. Basic Fun would not give me the exact number of such stores.

Price of the two-reel blister packs are a suggested \$9.99 retail but they sell for much more than that on Amazon.

Schylling also displays View-Master in their booth, and said they are happy with the sales numbers. So, after 80 years, although I was hoping for more of a View-Master presence than I saw—how many toy companies can boast of a product which is still around after 80 years?! There are two other companies presently selling View-Master

(Continued on page 31)

Three-reel blister sets in the Warm Fuzzy booth, two at right of a more standard design and two on the left of the transparent face plate “View Magic” design, which appears to offer little diffusion of incoming light. Could this be the knock-off that eventually outlasts View-Master?



Jeremy Rowe

(Dudley P. Flanders' Apache Scouts of "A" Company)

We continue our series in which historians and stereographers write a monograph about a favorite 3-D image they would choose to take with them were they exiled to a remote desert isle. This issue features a selection by photo historian and educator Dr. Jeremy Rowe.

Around 1980, Jeremy bought his first stereoview at the Western Photographic Collector's Association (WPCA) show in Pasadena. A few months later, as he reviewed his budding collection through a stereoscope, he was hit by a previously lost childhood memory: when he was six or seven, he would sit on his great grandmother's porch swing in Monticello, Indiana with a box of stereoviews and viewer she stored behind the door within the base of her Victrola. According to Jeremy, "This feeling of déjà vu periodically returns as I continue to immerse myself in my collection."

For three decades, Jeremy has researched and written about 19th and early 20th century photographs. Publications include the books *Arizona Photographers 1850-1920: A History and Directory*, *Arizona Real Photo Postcards*:

A History and Portfolio, Early Maricopa County 1871-1920, and Arizona Stereographs 1865-1930, as well as numerous chapters and articles on photo-

Crown Jewels

Favorite 3-D Images from Photographers & Collectors

by Douglas Heil

graphic history. He has curated exhibitions with regional museums, Sky Harbor Airport, and a permanent exhibit at the Talking Stick Resort in Scottsdale. Jeremy serves on several boards, including the Daguerreian Society as Past President, The Ephemera Society of America, Daniel Nagrin Theatre Film & Dance Foundation Inc. as Chairman of the Board, and National Stereoscopic Association. Jeremy was the Arizona coordinator for the Library of Congress American Memory project, a digital historic photographic collection, and was a co-principal investigator on other digital library and 3-D modeling

and visualization projects, including a National Science Foundation-funded 3-D Digital library project, Knowledge and Distributed Intelligence and projects funded by In-Q-Tel, NEH, NEA, NIH, IMLS, DOD and NOAA. He is currently a member of the Arizona State University Emeritus Faculty, and a Senior Research Scientist at New York University. This summer,

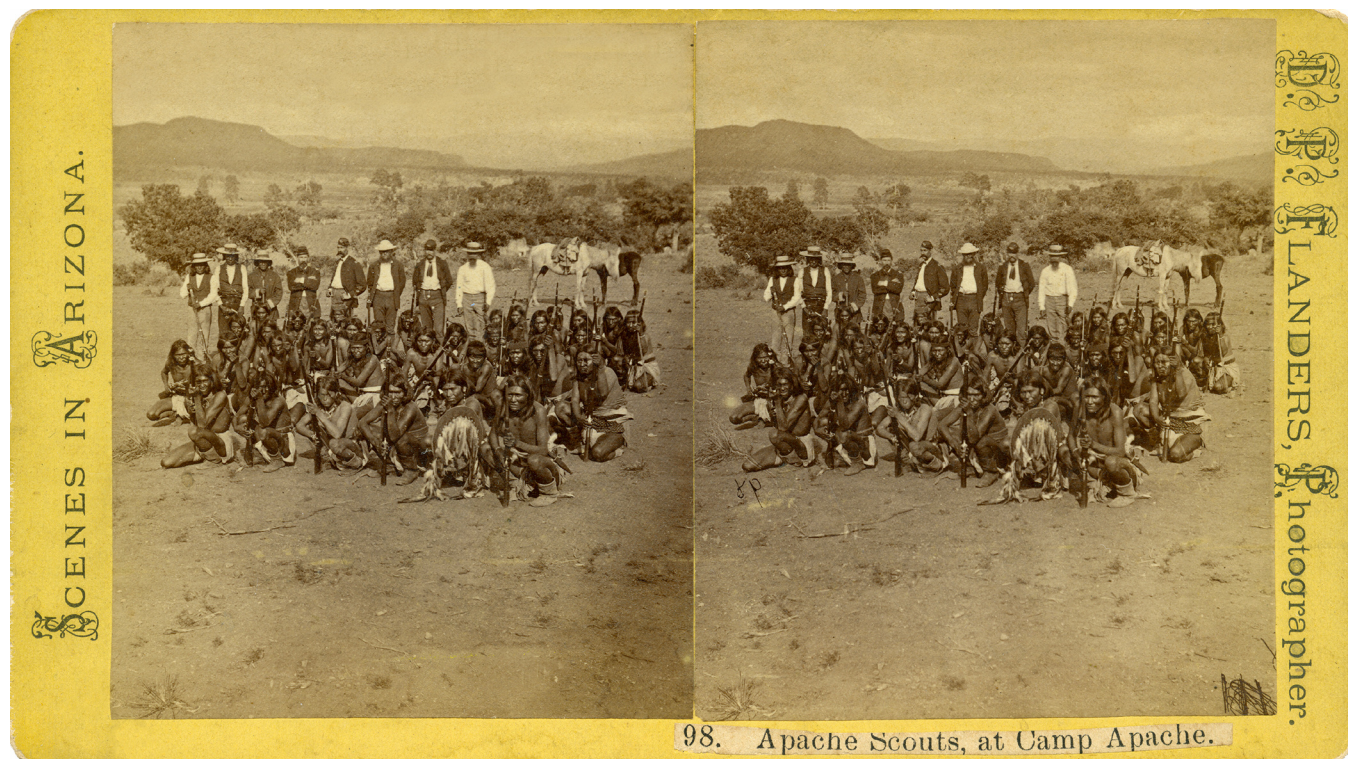
Jeremy received the William C. Darrah "Fellow of the NSA" Award for Distinguished Scholarship and Extraordinary Knowledge of Stereoscopy.

The following is his monograph.

I've become fascinated by early Arizona Territorial photographers. This obsession led to pursuing their images, and then working to better understand how and why the images were made.

The Wheeler and Powell Grand Canyon Expeditions gave the world hundreds of images of the Canyon, its unusual fauna and flora, and

Dudley P. Flanders #98: [Apache Scouts of "A" Company, including Archie McIntosh, Mickey Free, Dandy Jim, Nosey and Alchesay near the San Carlos Reservation with (at rear) General George Crook, Captain Randall, Lieutenant Price and Diablo, One-eyed Miguel and Pedro.] (1874)



98. Apache Scouts, at Camp Apache.

Native population. They were distributed as popular press engravings, scientific reports, and stereographs. Though Territorial Arizona had several pioneer photographers who operated before the Surveys, their work saw limited distribution outside of the region.

A Los Angeles photographer, Dudley P. Flanders, learned his craft from Edgar Henry Vance in San Francisco and operated Flanders & Godfrey's "Art Photographic Parlor" in Downey's Block with William M. Godfrey.² Flanders reacted to interest generated by the surveys and planned to go to Arizona to make stereoviews. With new partner Henri Penlon, he left for Arizona on November 14, 1873, traveling through San Bernardino to Fort Mojave, arriving on December 8. Sadly, Penlon passed away early in the trip—on February 6th, 1874 in Prescott.³

Flanders continued his photographic excursion, renting studio space in Prescott and Tucson, and traveling with portable darkroom to Camp Verde, Maricopa Wells, Fort Bowie and the new San Carlos reservation. Though Flanders produced some cartes de visites and cabinet cards, his primary format was stereographs. Many of his images are the first, and in some cases only images that exist of these locations from this era.

I like images that provide quandaries—that offer mysteries to explore and clues to follow. The view Flanders made of General George Crook and his Apache Scouts is such a view.

In Tucson, Flanders worked in the studio of local photographer Adolpho Rodrigo. They left Tucson at the end of August 1874 to photograph the military leaders and



Detail from the view showing Major Jake Randall (left), General Crook (in pith helmet) and Lieutenant William Rice at the San Carlos reservation in 1874.



The Apache scout Nantaje, second from right in the back row in the view, confirmed by the studio photo at right.

Apaches that had recently been relocated to the new San Carlos reservation.⁴

A primary target was General George Crook. Crook was born in Ohio, but went west in 1852, where he gained a reputation as an "Indian fighter" in California and Oregon. He was ordered east in 1861 for the Civil War. After distinguishing himself in such legendary battles as the Second Bull Run, Antietam, and Chickamauga, Crook ended the war as a Lieutenant Colonel and was assigned back to the Pacific Northwest. After the 1860s Snake war campaign in Oregon, Crook was promoted to Brigadier General. He was appointed Commander of Arizona in 1871 by President Grant to oversee relocation of Yavapai and Apache to the new reservations.

After the death of Cochise in 1874, Crook oversaw military efforts to move the Tonto, Chiricahua, and White Mountain Apache to the San Carlos Reservation. Crook recruited a team of Apache scouts from Fort Apache to assist his troops. Many of Crook's scouts continued to serve with government troops through the


1880s campaign against Geronimo. Ten, including Chiquito, "Jim," Nantaje, and Alchesay, received the Medal of Honor for their service during the Tonto Basin Campaign.⁵

Flanders and Rodrigo caught up with General Crook and his Company "A" scouts at the San Carlos reservation in late summer 1874. They posed Crook, easily recognizable with his muttonchops and pith helmet, with Major Jake Randall and Lieutenant William Rice behind the 36 scouts.

Though this image was taken as a stereograph, for many years it was primarily known from a second or third generation large format copy. Identification of individuals from the copies was difficult and compounded by spurious identifications that periodically surfaced. When one of the original stereographs surfaced, it was much sharper than the larger images, enabling more accurate identifications.

The blend of historic importance, the mystique of the subjects, the tantalizing identity clues, and the quest to question or confirm previous identifications make this an image to rescue and work with on a desert island—ideally one with internet access to keep following the trail...

Notes

1. The identification on the stereograph's verso inaccurately states, "Apache Scouts, at Camp Apache." In fact, Crook does not appear to have made it as far North as Fort Apache during his trip, though he did visit San Carlos, Camp Grant and Camp Verde. The "A" Company gained recognition for battling Del Shay and Apache renegades at Salt River Cave.
2. *Los Angeles Express*, May 16, 1872.
3. *Prescott Miner*, February 6, 1874.
4. *Arizona Citizen* August 22, 1874.
5. The second scout from the right in the back row is indisputably Nantaje. A magnification of his image has been placed alongside another Nantaje photo. 

This column presents the favorite 3-D images of both photographers and collectors, were they asked which they would want with them if exiled on a desert isle. Each installment will share an image that is accompanied by a longer monograph or interview. An occasional issue might also unite several favorites from different contributors that share a common bond—whether that be a place, a subject, or an approach.

Toni Myers 1943 - 2019

Award winning filmmaker Toni Myers died at 75 on February 18 at her home in Toronto of cancer first diagnosed in October. Involved with Imax since 1971, she worked as an editor, writer, producer and director of giant-screen documentaries, many of the best in awe-inspiring 3-D.

Myers received the Giant Screen Cinema Association (GSCA) 2018 Outstanding Achievement award for her life-time achievements and contributions to the giant screen industry. (See SW Vol. 44 No. 3 page 24.) She recently was awarded the Order of Canada, one of Canada's highest honors, and the NASA Exceptional Public Achievement Award, given for contributions to further the mission of the U.S. space program. She turned



Graeme Ferguson & Toni Myers at the 2006 Giant Screen Cinema Association conference. Ferguson, one of the founders of Imax, invited Myers to collaborate on films starting in the early 1970s. (Photo by Lawrence Kaufman)

Myers, a Canadian filmmaker with nearly a 50-year career at Imax, sent astronauts into space after she taught them how to use IMAX cameras and the basics of lighting, framing and recording sound and directed them as they sent back images for giant-screen documentaries she either wrote, directed, produced or edited. Starting with *The Dream Is Alive* (1985) and then *Blue Planet* (1990), these films pointed cameras from space back to Earth to reveal the planet as never before. Myers for decades made films for Imax that use high-resolution photography and

video to project a bird's eye view of a fast-changing Earth from space onto giant screens.

The Order of Canada was awarded to Myers in Toronto by Julie Payette, the governor general of Canada and fittingly herself a former Canadian astronaut who has logged two space flights. In December 2018, three former American astronauts in Toronto presented her the NASA Exceptional Public Achievement Award. Others to have received the NASA tribute include Ridley Scott and Stephen Colbert. (There have been numerous IMAX 3D cameras taken up to the International Space Station. See SW Vol. 28 No. 5 pages 5 and 8.)

Myers also inspired Hollywood filmmakers, most notably Christopher Nolan, who pointed to her film documentation of space exploration as having helped him with *Interstellar* to give his own audience a sense of physically being in orbit. Recalled Nolan, "One of the first things I wanted to do for research was to view some original prints [of IMAX documentaries], and we did a whole day's viewing, hours and hours of incredible images, and the name on the films, it was Toni Myers." For more, see tinyurl.com/y3b6449s.

NewViews

Current Information on Stereo Today

by David Starkman, Lawrence Kaufman & John Dennis

120 astronauts and cosmonauts into moviemakers for Disney's *A Beautiful Planet* (2016) and Warner Bros. *Hubble 3D* (2010) and *Space Station 3D* (2002).

1954: Sixty-Five Years Ago

It was a wild ride for 3-D all through 1953. As 1953 began, 3-D and *Bwana Devil* was all the talk. Every movie studio rushed to cash in as soon as possible. Of the 16,000 movie theaters, many hundred paid for the upgrades necessary to project 3-D, other theaters waited and others would soon upgrade for wide screen projection systems. The theaters which had upgraded to 3-D soon had numerous titles to project, unfortunately the movie going

public all too soon grew tired of 3-D. By late summer, too many were predicting the end was near. There were at least two single strip systems offered, but it was probably too late. Fortunately the holiday 3-D movie selections brought in large crowds and all began to look rosy. But as the calendars changed to 1954, wide screen came out the winner and movies which had been shot in 3-D, were only being released in 2-D or playing very few 3-D screenings.

Checkout some ads and articles posted on the la3dclub website at la3dclub.com/1954-sixty-five-years-ago. Also see the Home Theater 3-D column on the history of wide screen concepts in this issue.

This column depends on readers for information. (We don't know everything!) Please send information or questions to David Starkman, NewViews Editor, 4049 Coogan Circle, Culver City, CA 90232. Email: reel3d@aol.com.

2019 SD&A 3D Theater Winners

On January 14, 2019, a selection of thirty 3-D films was showcased at the Hyatt Regency San Francisco Airport hotel as part of the 30th annual Stereoscopic Displays and Applications (SD&A) conference 3D Theater Session. Attendees were treated to an outstanding selection of 3-D cinema and video content. This annual event exhibits the wide range of 3-D content currently being produced and exhibited around the world—from major studios to researchers to talented individuals.

In order to reward and recognize the high-quality work that is being conducted in this field, the session producers and judges announced the following Best-of-Show award winners, both being NSA members and frequent 3D-Con presenters.

Best-of-Show Live-Action Category

Albuquerque Balloon Festival - Mass Ascension by John Hart (USA), Professor Emeritus in the department of Atmospheric and Oceanic Sciences at the University of Colorado Boulder. See SW Vol. 44 No. 3 page 8 and hart3d.com.

Best-of-Show Animation Category

The Simple Carnival - Go Away I Like You Too Much by Jeff Boller (USA). Singer/songwriter Jeff Boller created his animated music video about a boy who has a crush on a girl and subsequently wants to avoid her, over the course of a year and a half. Part of the video was shown as a work in progress at 3D-Con 2018. For more of Jeff's works, see simplecarnival.com.

The full list of 3-D content exhibited at the session follows:

Competition Category

Albuquerque Balloon Festival - Mass Ascension: John Hart (USA)

Backyard Birds 1: Hélio Augusto Godoy de Souza (Brazil)

Crooked Billet II: Richard Connew (UK)

desperateBeauty - Strategies (music video excerpt): desperateBeauty (UK)

Domino Secret of the Lost World: Marek Audy (Czech Republic)

Fascination Mountains: Produced by KUK Filmproduction for psHolix AG (Germany)

Flamenco: Demetri Portelli and Tony Davis (USA)

Hidden Stereo Treasures: Creator: Robert Bloomberg; Motion graphics: Steve Andersen and Pad McLaughlin (USA)

Macy's Flower Show: E. James Smith (USA)

Metamorphosis: Michel Patient (France)

Mystery Fire: Aleksey Osipenkov (Russia)

Platform 6: Karel Bata (UK)

Space... Spaces!: Esther Jacopin (France)

The Reaper: Simon Querez (USA)

The Simple Carnival - Go Away I Like You Too Much: Jeff Boller (USA)

The Stereoscopic Society: Kate Sullivan with the Stereoscopic Society (UK)

The Virtual (Reality) Museum of Immersive Experiences: Volker Kuchelmeister (Australia)

Toylettes in 3D: Christian A. Zschammer (Germany)

Une Histoire D'amour (A Love Story): Julien Charprier (France)

Vikramshila University in 3D: Royal Tech Media Private Limited (India)

Demonstration Category

Avengers: Infinity War: Marvel Studios (USA)

Charlie Chaplin 'Accidental 3-D' (from 1928): Eric Kurland (USA)

Coco: Pixar Animation Studios (USA)

Cryogen Children: Sadie Schiffman-Eller (USA)

Incredibles 2: Pixar Animation Studios (USA)

Moonlight: Peter Rose (USA)

Nanoanalysis of an Optoelectronic Device:

Device manufacture: Compound Semiconductor Technologies; Data collection: William Rickard and Charlie Ironside, Curtin University; Visualization: Jesse Helliwell, Curtin HIVE (Australia)

Sangaree (1953): Kino Lorber; restored by 3-D Film Archive (USA)

Skateboard Park: Peter Rose (USA)

The Maze (1953): Kino Lorber; restored by 3-D Film Archive (USA)

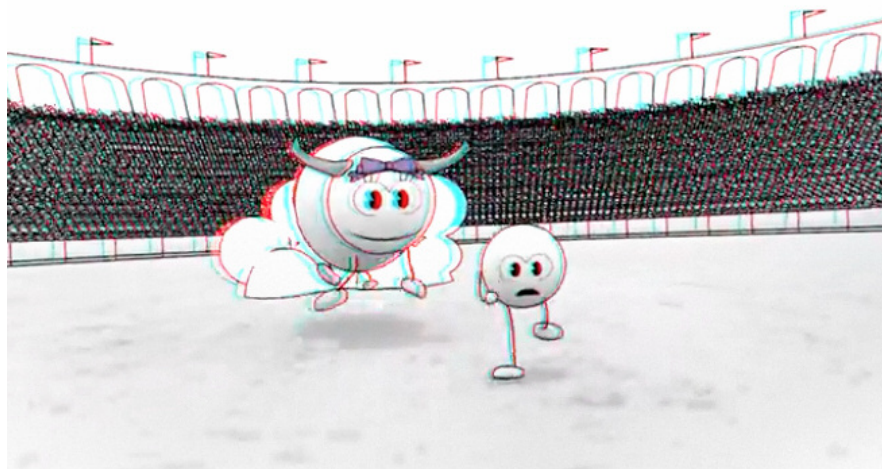
Judges at this year's event were Miriam Ross from Victoria University of Wellington (NZ), where she is Senior Lecturer in the Film Programme, and Eric Kurland from 3-D Space, who has worked on 3-D productions for Fox and OK GO.

Producers were John Stern (Intuitive Surgical, retired), Dan Lawrence (DepthQ Stereoscopic); Chris Ward (Lightspeed Design Group and DepthQ Stereoscopic), and Andrew Woods (Curtin University).

Projection sponsors were DepthQ Stereoscopic and Christie Digital, and 3D Theater partners were LA 3-D Movie Festival and 3-D Film Archive.

The annual SD&A conference is the world's premier conference for 3-D innovation. It is the largest and longest-running technical conference dedicated to the discussion of stereoscopic 3-D imaging topics. Special sessions include keynote presentations and live demonstrations of stereoscopic displays and applications. Further information about the SD&A conference is available at stereoscopic.org and information about the SD&A 3D Theater Session is at stereoscopic.org/3dcinema.

From the SD&A Best-of-show Animation Category winner *The Simple Carnival - Go Away I Like You Too Much* by Jeff Boller. See tinyurl.com/y49q4976.



The 2019 Lumiere Awards

by David Starkman

On January 30th, 2019 The Advanced Imaging Society held its 10th annual awards ceremony at the Warner Brothers Studios in Burbank, California. 28 Lumiere statuettes were awarded for distinguished creative and technical achievements in 3-D, Virtual Reality, HDR (High Dynamic Range), Augmented Reality, and use of 8K.

Susan Pinsky and I were privileged to be able to attend. The AIS (Advanced Imaging Society) began 10 years ago as the International 3D Society, and we were at their first award ceremony on February 23, 2010 at Mann's Chinese Theater in Hollywood.

Avatar had come out in 2009, and this was the beginning of a real renaissance in 3-D movies. While 3-D movies are still being released on a regular basis, after a few years the International 3D Society decided that 3-D was too limiting in the light of advanced imaging developments in areas beyond 3-D. So the name was changed to The Advanced Imag-

ing Society, and the awards were expanded to cover areas mentioned above.

This year's awards covered a wider range of advanced imaging techniques than any previous year.

The list of awards speaks for itself:

Best Animated Short: *BOA* (Pixar)

Best 3-D Documentary: *Volcanoes* (SK Films)

Best Documentary- International: *Planet Power* (NWAWE)

Best Immersive Experience Entertainment Feature: *Black Panther* (Marvel)

Best Feature Film Live Action: *Ready Player One* (Amblin Entertainment)

Best Stereography Live Action Feature: *Ready Player One* (Amblin Entertainment)

Best Animated Feature Film: *Spiderman-Into the Spider-Verse* (Sony Pictures Animation)

Best Stereography For Animated Feature Film: *Spiderman-Into the Spider-Verse* (Sony Pictures Animation)

9. Best Scene or Sequence: *Mission Impossible: Fallout* (Paramount)

Best 2-D to 3-D Conversion: *Ready Player One* (Amblin Entertainment)

Best Location Based VR Experience: *Hologate*

Best use of HDR in a Feature Motion Picture: *A Star Is Born* (Warner Bros.)

Best use of HDR in a Feature Motion Picture Foreign Language: *Roma* (Netflix)

Best use of HDR in a Series: *Lost In Space* (Netflix)

Best use of HDR in an Animated Feature: *Ralph Breaks the Internet* (Disney Animation Studios)

Governor's Award: *They Shall Not Grow Old* (Wingnut Films)

Best VR Immersive Experience: *Hero* (Ink Stories)

Best use of VR for Education: *One Strange Rock* (National Geographic)

Best use of Virtual Production: *Shark Tank* (Sony Innovation Studios)

Best use of VR for Social Impact: *Van Jones' the Messy Truth VR* (Magic Labs Media/Meridian Hill Pictures)

Best use of VR for Health and Well-Being: *Tripp*

Best 360 Film: *Sun Ladies* (Jack Blue/Lucid Dream Productions)

Best use of AR/VR for Retail Brand: *Holoroom* (Lowes Innovation Labs)



The Steven J. Ross Theater at Warner Brothers Studios where the 10th annual Lumiere Awards ceremony was held.

(Stereo by David Starkman)



Left: Corey Turner, Executive Stereographer on Mission Impossible: Fallout. Middle: Christopher McQuarrie Director on Mission Impossible: Fallout. Right: Celine Tricart: Director and Cinematographer on Sun Ladies.

(Stereo by David Starkman)

Best Interactive Brand Experience: *eBay Holiday* (eBay - Kervinteractive)

Best VR Experience - Animated: *Cycles* (Walt Disney Animation)

Best use of 8K for Production (Hanabi Japan)

Sir Charles Wheatstone Award: (Cinionic)

Harold Lloyd Award for Filmmaking: (Christopher McQuarrie)

Of the 28 categories, 11 were for 3-D films or 3-D experiences.

Short 3-D clips were shown for all of the 3-D winners. The longest clip was for the "Best Scene or Sequence." This was a 3-D clip of the helicopter scene from *Mission Impossible: Fallout*. I won't describe it, but it's a pretty mind-boggling 3-D scene.

The surprise of the evening was when Tom Cruise popped out from back stage to present the award to the film's director Christopher McQuarrie, who also received the Harold Lloyd award later in the evening, presented by Harold Lloyd's granddaughter Susanne Lloyd.

While all of the 3-D winners made excellent use of 3-D, there is one award that was not for 3-D that I think deserves special mention. It is the "Best 360 Film" award that went to *Sun Ladies*, for which Celine Tricart is both Director and Cinematographer.

This is a Virtual Reality documentary, and Celine, who was there to receive the award, told us that it is also in 3-D. Sadly, it could not be shown in 3-D or VR on the big screen, but we got a very wide angle 2-D version to see as a clip. After ISIS soldiers invaded the Yazidi community of Sinjar, Iraq, killing all of the men and taking the women and girls as sex slaves, these brave women, the "Sun Ladies" escaped and formed a female-only fighting unit to bring back their sisters and protect the honor and dignity of their people. Celine went on location to shoot this VR experience that immerses the viewer to bring their story through empathy.

Through the Lumiere Awards the Advanced Imaging Society recognizes the importance of cutting edge techniques in visual storytelling, and offers a diverse perspective on these achievements that is different from the Academy Awards. It will be interesting to see what advances will be recognized at these awards in the next 10 years.

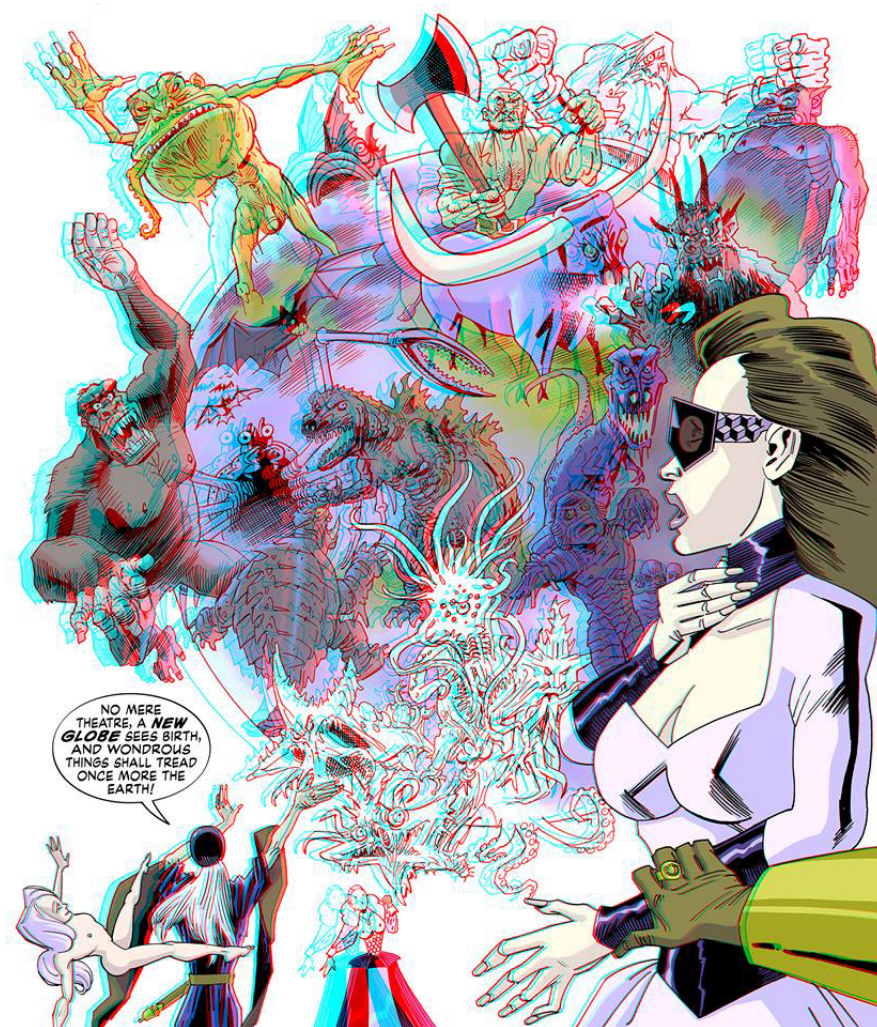
Extraordinary Gentlemen

You may recall 2007 graphic novel *The League of Extraordinary Gentlemen: The Black Dossier* and its 2008 hardbound version, written by Alan Moore with art and cover by Kevin O'Neill. It was the next chapter in *The League of Extraordinary Gentlemen* and included a 3-D section complete with custom glasses, as well as additional text pieces, maps, and a stunning cutaway double-page spread of Captain Nemo's Nautilus submarine by Kevin O'Neill. The absolute edition (\$99.00) also featured 3-D end-

papers by Ray Zone and it went through more than one printing of the hardbound version.

Last year, Charles Barnard and Christian LeBlanc teamed up and converted several sections of *The League of Extraordinary Gentlemen: Tempest comic series* to 3-D, reportedly the last installment of the series by writer Alan Moore and artist Kevin O'Neill. Issue number three is subtitled *Mina for Young Ladies*. Issues four and five also reportedly include some 3-D.

Tableau from *The League of Extraordinary Gentlemen, Tempest series number 4.*



Upcoming 3-D Conventions

- NSA 3D-Con 2019 – Tuesday July 30, 2019 to Monday August 5, 2019 in Akron, Ohio. Co-chaired by Barb Gauche and John Bueche. \$129 room rate. The 45th Annual 3D-Con presented by the National

Stereoscopic Association with Trade Fair, 3-D Projection, Photography & 3-D Workshops, 3-D Art Gallery, Historic & Modern Stereo Card Exhibits, Image Competitions, Photography Excursions, Photo &

Equipment Auction, Speakers and more. See 3d-con.com.

- International Stereoscopic Union (ISU) – The 22nd ISU Congress will be in Lübeck Germany from August 20 to 26, 2019. See details at isu2019.org.

- PSA Conference 2019 – The Photographic Society of America annual conference will be Sunday, September 22 to Saturday Sept. 28 in Spokane, Washington. They have at least an evening of 3-D,

many photo excursions and many workshops. See psa-photo.org/conference-2019.

Julie Adams 1926 – 2019

Not too surprising, but certainly just as sad, Julie Adams, who won the affections of the *Creature from the Black Lagoon* (1954) in 3-D and also starred in the 3-D film *Wings of the Hawk* (1953) as guerrilla leader Raquel Noriega, passed away February 3rd in Los Angeles at the age of 92. In a career that spanned eight decades, she appeared in fifty films and hundreds of television episodes. She also starred in more than a dozen plays. She truly cherished her fans and was delighted that so many were enchanted by her performance in *Creature* and numerous other projects (See SW Vol. 44

No. 1 page 20). Her book *The Lucky Southern Star: Reflections from the Black Lagoon* is enjoyed by film enthusiasts around the world. It's available from her website julieadams.biz where you will also find a seven disc audio set, read by Adams herself, plus a short film on DVD or blu-ray, co-directed by her sons and starring her grandson.

Ben Chapman, who had played the Creature on land in the film persuaded her to join him at autograph shows and she loved the interactions with her fans. Chapman passed away in 2008 at age 79. Ricou Browning played the underwater Creature in

all three of the 1950s Creature features and had joined them in recent years. Last year Adams was finally slowing down, but she did appear at the San Fernando Valley Comic Book Convention on March 18, 2018. She had very graciously appeared and answered questions at a 60th anniversary 3-D screening of *Creature From the Black Lagoon* presented by 3-D SPACE during the 2014 Monsterpalooza and even after signing autographs all day she stayed and watched and enjoyed the film with her fans. 📺



.....
Julie Adams and Ricou Browning after a full day of signing autographs for *Creature From the Black Lagoon* fans at the 2014 Monsterpalooza in Burbank.
(Stereo by Lawrence Kaufman)
.....

Home Theater 3-D (Continued from page 20)

surround sound. Some have bars and restaurants with chair-side service. Some also have D-BOX moving chairs that move with the action on the screen. This all translates well into your home theater with big screen (55" and above) Dolby ATMOS and DTS:X sound from at least 11 speakers and two subwoofers. You can even get D-Box chairs for your home!

So bigger is better and now bigger more detailed screens at the theater and in our homes lead to more involvement in the movie and more enjoyment for the viewer. For those fortunate enough to have a front projection system of 100" or more the enveloping effect is amazing! For those of us who value depth in our movies and television shows the inclusion of 3-D specifications sooner rather than later will be much appreciated! 📺

2019 3D-Con Excursions

(Continued from page 15)

Chocolate Company and Factory where you will watch a movie about the two companies. You will have time to purchase many delicious candies, including the chocolate version of the seed, or nut, of the Ohio state tree, the Buckeye. For more about Harry London/Fannie May Chocolates, visit fanniemay.com. 📺



3D-Con 2019
Akron, Ohio
July 30 - August 5

Okay, Okay!!! We're pretty sure that a blimp can't pull a banner, let alone three. But, we hope that we caught your attention. This is just a subtle reminder to mark your calendar and make arrangements to attend 3D-Con 2019 - our annual celebration of stereo photography past, present and future. New information has been added to our website, 3D-Con.com. Check back frequently for updates.

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BACK ISSUES of *Stereo World* magazine. These are new old stock and span mainly from volume 16 (1989) to volume 27 (2000) but I have other issues too in smaller quantities. Please see my web page: <http://www.drt3d.com/SW/> or contact George Themelis at drt-3d@live.com, 440-666-4006.

GREAT WAR (1914-1918) GLASS VIEWS - especially amateur collections, but commercial slides as well; both 6x13 and 45x107, negative and positive: please contact ian.ference@gmail.com or use Contact page on www.brooklynstereography.com.

SHACKLETON'S 1907-1909 British Antarctic Expedition, a Journey in 3-D, new book by NSA member Ron Blum illustrated with never before published views. Available from: South Australian Museum Bookshop shop.samuseum.sa.gov.au/en/newproducts. See the first tow of ship to the Antarctic, the first motor car in the region and the first ponies on the southern continent.

STEREOSCOPES: The First One Hundred Years by Paul Wing (1996), softcover 272 pages, 750+ illustrations. Shrink wrapped NEW! *Exclusive here* \$60 US postpaid; check with order please: Russell Norton PO Bx 1070 New Haven CT 06504 / stereoview.com

THE DETROIT Stereographic Society invites you to attend our monthly meetings at the Livonia Senior Center, on the second Wednesdays, September through June. Visit our website www.Detroit3D.org or call Dennis Green at (248) 398-3591.

VISIT www.stereoscopy.com/3d-books and have a look into the five View-Master Collector's Guides: a total of 2,164 pages of View-Master information, including 132 color pages showing old V-M ads and 1,300 V-M packet covers.

As one of the benefits of membership, ANSA members are offered free use of classified advertising. Members may use 100 words per year, divided into three ads with a maximum of 35 words per ad. Additional words or additional ads may be inserted at the rate of 20¢ per word. Please include payments with ads. We cannot provide billings. Ads will be placed in the issue being assembled at the time of their arrival unless a specific later issue is requested.

Send all ads, with payment, to:
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5610 SE 71st, Portland, OR 97206.
(A rate sheet for display ads is available from the same address. Please send SASE.)

Wanted

ALABAMA STEREOVIEWS. Michael McEachern, 711 South 3rd St., Hamilton, MT 59840. (406) 363-7507. cave3D@msn.com.

ALASKA STEREOVIEWS: paying high prices for Muybridge, Maynard, Brodeck, Haynes, McIntire. Want Alaska, Yukon, Klondike photographs, postcards, ephemera, anything! Wood, Box 22165, Juneau, AK 99802, (907) 789-8450.

ANY IMAGES of Nevada City or Grass Valley, California. Mautz, 329 Bridge Way, Nevada City, CA 95959, cmautz@nccn.net.

BLACK HILLS Stereoviews from 1874-1880, and photographers. (Book in progress.) Also want any other Dakota, So. Dakota and No. Dakota photographs and stereos. Robert Kolbe, 1301 S Duluth Ave, Sioux Falls, SD 57105, (605) 360-0031.

CANADIAN VIEWS: Montreal and Quebec City stereos, larger formats and photo albums wanted! Taken before 1910. Especially Vallee, Ellisson, Notman, Parks, or other fine photographers. Email Pierre Lavoie at papiolavoie@hotmail.com or call (418)440-7698.

COLLECT, TRADE, BUY & SELL: 19th Century images (cased, stereo, Cdv, cabinet & large paper) Bill Lee, 8658 Galdiator Way, Sandy, UT 84094. billleete@juno.com Specialties: Western, Locomotives, Photographers, Indians, Mining, J. Carbutt, Expeditions, Ships, Utah and occupational.

COMICAL STEREO view Sets in Good to Very Good Condition ed.minas409@gmail.com.

F. G. WELLER VIEWS. Looking for specific comic/sentimental views by Weller to complete scholarly publication. Will purchase or request a scan with acknowledgement of contribution. Contact davism6@sage.edu for list of needed views.

I BUY ARIZONA PHOTOGRAPHS! Stereoviews, cabinet cards, mounted photographs, RP post cards, albums and photographs taken before 1920. Also interested in Xeroxes of Arizona stereographs and photos for research. Will pay postage and copy costs. Jeremy Rowe, 2120 S. Las Palmas Cir., Mesa, AZ 85202.

KEYSTONE VIEW SALESMAN MANUALS, circulars, and ephemera - originals, reprints, or xeroxes wanted. The earlier the better! Email Leigh Gleason, leigh.e.gleason@gmail.com or call 951-213-1501.

LOOKING FOR an E&HT Anthony catalog of stereoviews, if such item exists! Digital or paper edition, possibly by Tex Treadwell. Contact Bill, Bstahl7@comcast.net.

MUYBRIDGE VIEWS - Top prices paid. Also Michigan and Mining - the 3Ms. Many views available for trade. Leonard Walle, viscata@aol.com.

Wanted

O.S. LEELAND. Writer seeks images and information on South Dakota photographer O.S. Leeland. He produced stereos mainly in 1904. The mounts read "Leeland Art & Mfg. Co, Publishers, Mitchell, South Dakota." Cynthia Elyce Rubin, 8507 Giovana Court, Orlando, FL 32836, cynthiaelyce@earthlink.net.

SINGLE VIEWS, or complete sets of "Longfellow's Wayside Inn" done by D. C. Osborn, Artist, Assabet, Mass., Lawrence M. Rochette, 169 Woodland Drive, Marlborough, MA 01752.

STEREO WORLD BACK ISSUES. Vol. 1, #6., Vol. 2, #?s 1 thru 6, Vol. 3, #1 and #2. Email steve@eighttiron.com with price and condition.

STUTTGART (Germany) views. Mostly looking for flat-mount views labelled "Stuttgart", "Württemberg - Stuttgart", "Cannstatt" or "Berg". Also views by Brandseph, Autenrieth, Schaller or Zabuesnig. Contact Alexander by e-mail at klein@stereoscopy.com or (415) 852-9911.

SURPRISE TISSUES wanted, especially unusual ones other than moons and clouds. Will buy or trade. Please send details to britishstereos@hotmail.com.

WILLIAM ENGLAND/LSC: American views. Need scans of: Indian women at bead-work; A wayside scene/organ-grinders; The flume, White Mountains (with WE blindstamp). Information on boxed set of this series? Please contact Gerlind Lorch at william.english@web.de.

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View-Master at 80 (Continued from page 21)



A 500 piece, 24 x 18 inch lenticular 3-D puzzle from Zoffy.

"knock-off" items. The House of Marbles, an English based toy company, sells two different sets: *What the Butler Saw*—a one-reel boxed set with viewer featuring mildly risqué copies of vintage Victorian nudes, and *Bed-time Stories*—a boxed set with viewer including three children's bedtime stories. Both sets are beautifully boxed with great graphics—but quality is not up to the Licensed product. (See SW Vol. 43 No. 1 page 29.)

The other item is from a company called Warm Fuzzy, and includes four different three-reel blister sets; *Dinosaurs*, *Space*, *Sea Creatures*, and *Animals of the World*—each with a unique viewer. Two sets come with the typical shaped viewer and two come with a viewer of their own design in yellow, green, dark blue and light blue. Both House of Marbles and Warm Fuzzy say that sales are good.

I looked for other 3-D toys and found two companies, Daron and Zoofy, which sell a nice assortment of 3-D lenticular puzzles.

Daron sells a line of about 10 different 3-D lenticular puzzles of various sizes—all New York City themes—New York City taxis, sky-lines, Staten Island Ferry, New York City Police car, etc. Zoffy sells a large line of about 40 different 3-D lenticular puzzles in various sizes picturing African animals, reptiles, sea creatures, dinosaurs, space, dogs, etc.

I did not see any other View-Master items or lenticular items except for lenticular bookmarks, notebook covers etc. There were also some anaglyph items at various dealers but nothing of note. So—all I can hope for is that next year I will again see View-Master at the Basic Fun booth. 📺



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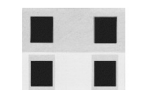


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We have a Winner! Actually two Winners! Both Carol Johnson and Keith Brady identified the bizarrely oversized stereo of San Miguel Mission initialed "B.A." as the work of Brother Amian. The Chapel, rebuilt many times, is the oldest church in the U.S.

Originally built under the Franciscans circa 1610-1626 on the site

of a ancient kiva of the Analco Indians, the structure suffered catastrophic damage in an 1872 storm that brought down the bell tower and the "San Jose" Bell. Brother Amian arrived in Santa Fe in 1880, and by 1887 the structure was in such ruin that the Christian Brothers, lacking funds, made the decision to demolish it. Fortunately, local preser-

vationists rescued and restored the building and it remains today as a Santa Fe landmark. Presumably Brother Amian made stereos of the Mission circa 1887, perhaps in an effort to document the dire condition and to help in fundraising for reconstruction.

Brother Amian (Arends) (1850-1916) of the De La Salle

Christian Brothers (FSC), emigrated to the U.S. from Prussia. He taught chemistry at the Santa Fe College (high school), and became the official geologist of the New Mexico Territory. He also produced paid ore assays and reported on the condition of the mines in the county.

And the bizarre format? There are examples of "B.A." work in the collec-

tions of Yale, Princeton, and New Mexico's Palace of the Governors photo archives. Many or most of these are boudoir cards and some have rubber stamped captions by "B.A." indicating that he had perhaps a bit more than amateur production. Everything, including the stereos, is mounted on boudoir size cards. Perhaps when the boudoir format is all you have, that is what you use!

This issue's Unknown roundhouse in an urban setting stereo was submitted by Breck Carrow. This is an image I think I may have seen before... perhaps eastern Pennsylvania? 🏠

The Unknowns

Can You Identify the Subjects of these Views?

by Russell Norton

Can you identify this stereo? Your interesting and challenging Unknowns submissions and ideas are eagerly awaited. Please email, call, or write Russell Norton at oldphoto9@earthlink.net, (203) 281-0066, PO Box 1070, New Haven CT 06504.



Editor's View (Continued from page 2)

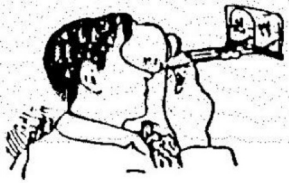
but at a fraction of the distances traveled and with a fraction of the output.

Living in A Hologram

The holographic principle holds that the universe is a three-dimensional image projected off a two-

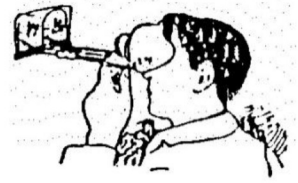
dimensional surface, much like a hologram emerges from a plate of photographic film. Physicist Matthew Headrick makes a brave attempt to explain the theory in a five-minute audio at tinyurl.com/y6bfmdjr. Like string theory or quantum entanglement, it's a

hard thing for many people to even start to get their head around, but it's certainly a thought exercise for really getting into 3-D. Might a lesser theory for a simpler universe posit that it rises anaglyphically from a cosmic phantogram? (Thanks to reader Bob Curtis for the tip.) 🏠



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